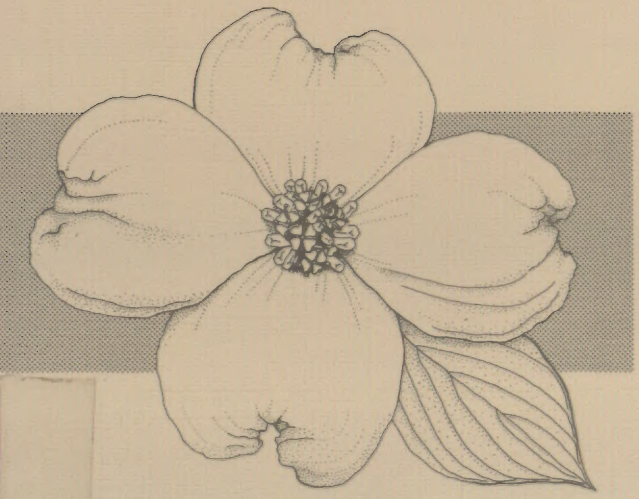
CATALOGUE OF THE FLORA OF MISSOURI

By George Yatskievych
and Joanna Turner



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By
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Flora of Missouri Project
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INTRODUCTION

Julian A. Steyermark's (1963) *Flora of Missouri* was a monumental addition to our knowledge of the native and introduced flora of Missouri. Since its publication, this book has served as an inspiration to amateur and professional botanists in the state and as a model floristic manual for those in other states to follow. In the 26 years (and six printings) since the volume was first published, substantial botanical exploration has been carried out in Missouri by a large number of workers. Many authoritative taxonomic revisions also have been published, which have modified our understanding of species limits and interrelationships in a number of plant groups. These additions and changes have become so numerous that a revision of Steyermark's *Flora* is urgently needed to satisfy the demand for up-to-date information on all of the state's flora by botanists, ecologists, interpretive naturalists, land managers, and plant lovers of all types. The **Flora of Missouri Project** was initiated in 1987 as a cooperative venture between the Missouri Department of Conservation and the Missouri Botanical Garden to meet this need for a revised floristic manual and will result in the eventual publication of a new book to be known as the second edition of *Steyermark's Flora of Missouri*.

The present catalogue is intended to serve as an interim update of the state's flora. It should allow users to bridge the gap between Steyermark's *Flora* and the more recent taxonomic and floristic literature. In addition, its relatively small size will allow its use as a checklist of the Missouri flora both indoors and in the field. The catalogue has many limitations and is not intended to supersede the existing, excellent, floristic manual, but rather to supplement it.

ORGANIZATIONAL PHILOSOPHY

The publication of catalogues such as this one seems to be a natural step in the process of compiling or revising a floristic manual, and a number of other catalogues provide ample precedent. Not all such catalogues have identical organization, however, and each meets somewhat different needs. At one extreme are catalogues containing copious taxonomic, distributional, and nomenclatural annotations. Examples of this style include the Palmer and Steyermark (1935) catalogue for Missouri and Smith's (1988) volume on Arkansas. At the other extreme are simple checklists such as the one for Indiana

(Crovello et al., 1983), which provide concise lists of an area's plants without miscellaneous information.

A second consideration is the degree of bibliographic citation in the catalogue. Many checklists, including the Indiana work (Crovello et al., 1983) and the recent compilation for New York (Mitchell, 1986), contain few to no references to the taxonomic literature to justify the accepted nomenclature. This practice limits the length of such works, and there is good reason to strive for conciseness in a catalogue, but it also limits their utility somewhat by forcing interested users to guess at the reasoning involved in the sudden nomenclatural transfer of some long-accepted name.

We have followed a format similar to that found in the popular catalogue for the flora of Arizona (Lehr, 1978). The present catalogue contains a complete list of Missouri's flora, including subspecies, varieties, and forms. Useful information, such as common names (where applicable) and page number for each species in Steyermark's *Flora*, is also included. Synonymy is presented, but is limited to inclusion of those superseded names contained in Steyermark's *Flora* and two other recent floristic manuals (for the Great Plains and Illinois).

Early in our work we realized that many botanists in the state were dependent on nomenclature of the excellent, recent floristic manual for the Great Plains (Great Plains Flora Association, 1986), which includes coverage of westernmost Missouri in its range. Many of the botanists interested in plants of eastern Missouri were using Mohlenbrock's (1986) concise, inexpensive manual for Illinois, which technically does not cover Missouri, but contains most of eastern Missouri's flora. To accommodate these users and to provide a link between the opinions on taxonomy and nomenclature expressed in these three floristic manuals, we decided to extend our presentation of synonymy to include all three books. On the other hand, information presented in the three-page *Errata* found in later printings of Steyermark's *Flora* has not been accepted without bibliographic citation, because many owners of the book do not have access to these pages and because many of the corrections presented in them were not justified in print. We did not ignore the *Errata*, but rather attempted to verify these nomenclatural changes during our bibliographic research.

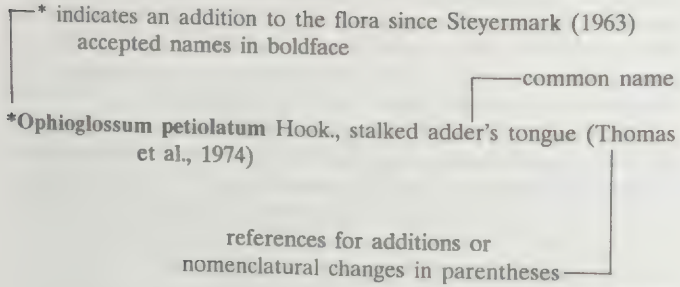
In most cases where our treatment differs nomenclaturally from any of the three cited floras, a bibliographic citation to pertinent literature in support of our view is given. References are compiled in a cumulative bibliography. Miscellaneous taxonomic comments refer primarily to those instances in which we were unable to find any reference to resolve a nomenclatural disagreement among the three floristic manuals. The catalogue does not include any new, previously unpublished plant names or combinations, nor does it include reports of taxa whose presence in Missouri has not been published elsewhere first. In addition, users should note that we have not provided documentation for corrections and changes in spelling, author citation (author abbreviations follow Halliday et al. (1984) where possible), or common names, although a substantial number of such changes are present.

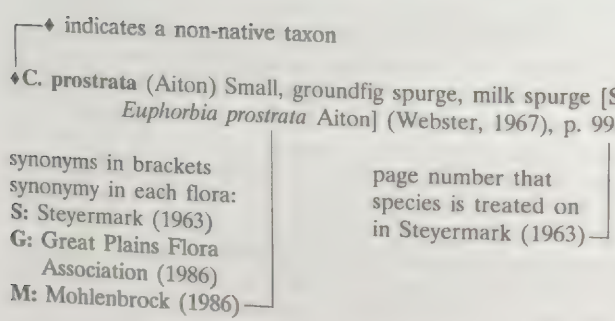
HOW TO USE THE CATALOGUE

The taxa included in the catalogue are **alphabetized** by family, species, subspecies, etc., within the major taxonomic groups. Note that taxa excluded from the flora are listed at the end of the taxonomic list, just prior to the bibliography. In an attempt to account for all of the binomials presently applied to Missouri species, a list of the named hybrids is also included following the main body of the catalogue. The genera of ferns and fern allies are included in families according to the system of Tryon and Tryon (1982), while the flowering plant genera (separated into dicots, then monocots) are included in families according to the system of Cronquist (1981). The conifer families are as in Steyermark (1963), because no better, comprehensive system of classification for gymnosperms is presently available. Changes in familial names and indications for those few genera transferred to different families are cross-referenced in the list, eliminating the need for an index to the catalogue.

We have attempted to indicate introduced taxa, including hybrids, in the catalogue, although there are a surprising number of species whose provenances are not sufficiently known to allow accurate determination of native ranges. We have been conservative in assigning non-native status to the species, and distributionally ambiguous taxa generally have been listed as native. To this extent we have undoubtedly erred in failing to recognize some introductions from surrounding states that accompanied the widespread habitat changes as Missouri was settled from the eastern United States during the past few centuries.

Two sample species are shown below to illustrate the organization of the entries:


* indicates an addition to the flora since Steyermark (1963)
accepted names in boldface
common name
*Ophioglossum petiolatum Hook., stalked adder's tongue (Thomas et al., 1974)
references for additions or nomenclatural changes in parentheses


♦ indicates a non-native taxon
♦C. prostrata (Aiton) Small, groundfig spurge, milk spurge [S, G: Euphorbia prostrata Aiton] (Webster, 1967), p. 994
synonyms in brackets
synonymy in each flora:
S: Steyermark (1963)
G: Great Plains Flora Association (1986)
M: Mohlenbrock (1986)
page number that species is treated on in Steyermark (1963)

The present catalogue is primarily a review of literature pertinent to additions and nomenclatural changes in the Missouri flora. It is not intended to be a complete phytotaxonomic bibliography of the state, and only those references supporting a change from the status quo are included. Some readers may criticize our decision to maintain a number of quadrinomials (formae within varieties or subspecies, within species) in the list. However, we did not feel that the catalogue was a proper forum for independent nomenclatural changes, and unless a specialist has given reasons why a particular infraspecific entity should no longer be recognized it has been maintained. The catalogue resulted from thorough bibliographic review of the taxonomic literature, supplemented with examination of selected specimens at several herbaria in Missouri, Illinois, and Kansas (F, KANU, MO, NEMO, SMS, UMO, WARM, and the University of Missouri, Kansas City).

The catalogue reflects our taxonomic opinions as expressed in our choices of literature to cite. Because systematics is a dynamic discipline, with new data and revisions constantly published, the nomenclature appearing in the new edition of *Steyermark's Flora of Missouri* will almost certainly differ for some groups from the nomenclature followed here. We view this as healthy refinement rather than as additional confusion. It is the fact that new taxa and new names are continually forced to the attention of Missouri's botanists that has created the demand for a newly revised floristic manual. With this in mind, we urge interested parties to bring further new botanical finds from Missouri to our attention and to provide constructive criticism of the taxonomic views presented here.

ACKNOWLEDGMENTS

We have enjoyed the generous support and assistance of many outstanding individuals during the process of compiling this catalogue. Although the authors ultimately must take full responsibility for the contents, a number of people provided advice and information that we feel greatly improved the volume. Peter Raven, Gerrit Davidse, and Nancy Morin at the Missouri Botanical Garden, as well as James H. Wilson, Rick Thom, Virginia Wallace, and John Wiley (retired) of the Missouri Department of Conservation, share responsibility for the inception of the Flora of Missouri Project, and have been enthusiastic supporters since the beginning. The curators of the herbaria consulted have always been helpful with finding pertinent specimens and providing general information. The staff at the wonderful Missouri Botanical Garden library, especially Dale Johnson, were indispensable in locating esoteric items of literature and in suggesting references. Amy Scheuler and George Rogers provided editorial expertise and Debbie Kama tamed our often temperamental computers. A number of individuals reviewed portions of the catalogue and provided taxonomic assistance with special problems: Ihsan Al-Shehbaz (Brassicaceae), Richard Carter (*Cyperus*, *Eleocharis*), David Castaner (*Carex*), William D'Arcy (Solanaceae), Roy Gereau (Poaceae), Peter Hoch (Onagraceae), Duane Isely (legume families), Richard Jensen (Fagaceae), Robbin Moran (ferns and fern allies), James Phipps (*Crataegus*), Richard Rabeler (Caryophyllaceae), Anton Reznicek (*Carex*). We are especially indebted to Robert Kral and Floyd Swink for their thorough review of the entire manuscript, and to Doug Ladd, among other things, for his insightful examination of introduced species. In addition, a number of Missouri botanists contributed advice and information to

various portions of the catalogue: Alan Brant, Karen Joyce, J. Mark Pelton, Paul Redfearn, Timothy Smith, Bill Summers, and Sue Taylor. Finally, our spouses, Kay Yatskievych and James Turner, are to be commended for their patience, assistance, and support. A little reassurance, now and then, goes a long way.

Without the initial support and friendship of the late Julian Steyermark, this project could never have been started. Those interested in the natural environment in Missouri owe a great debt of gratitude to this extraordinary botanist, a debt that we are happy to acknowledge. With this thought, we dedicate the catalogue to the memory of Dr. Julian A. Steyermark.

DIVISION PTERIDOPHYTA, ferns and fern allies

CLASS FILICOPSIDA, ferns

ADIANTACEAE, maidenhair fern family [S, G: POLYPODIACEAE]

ADIANTUM, maidenhair fern

Adiantum capillus-veneris L., southern maidenhair fern, Venus' hair fern, p. 22
A. pedatum L., northern maidenhair fern, p. 22
var. pedatum

ARGYROCHOSMA, cloak fern [S, G: NOTHOLAENA] (Windham, 1987)

Argyrochosma dealbata (Pursh) Windham, powdery cloak fern [S, G: *Notholaena dealbata* (Pursh) Kunze] (Windham, 1987), p. 24

CHEILANTHES, lip fern

Cheilanthes alabamensis (Buckley) Kunze, Alabama lip fern, p. 25
C. feei Moore, slender lip fern, p. 25
C. lanosa (Michaux) D. Eaton, hairy lip fern, p. 25
C. tomentosa Link, woolly lip fern, p. 25

NOTHOLAENA (see ARGYROCHOSMA)

PELLAEA, cliff brake

Pellaea atropurpurea (L.) Link, purple cliff brake, p. 24
f. atropurpurea
f. cristata (Trel.) Clute

Pellaea glabella Mett. ex Kuhn, smooth cliff brake, p. 24
var. glabella
***var. missouriensis** Gastony (Gastony, 1988)

ASPLENIACEAE, spleenwort family
[S, G: POLYPODIACEAE]

ASPLENIUM, spleenwort

Asplenium bradleyi D. Eaton, Bradley's spleenwort, p. 31
A. x *ebenoides* Scott, see named hybrids
A. x *gravesii* Maxon, see named hybrids
***A. montanum** Willd., mountain spleenwort (Key and Redfearn, 1973)
A. pinnatifidum Nutt., lobed spleenwort, p. 30
A. platyneuron (L.) Britton, Sterns & Pogg., ebony spleenwort, p. 31
var. incisum (Howe ex Peck) B. L. Robins. [**S:** f. *serratum* (E. S. Miller) R. Hoffm.; **G, M:** *A. platyneuron*] (Taylor et al., 1976)
var. platyneuron
A. resiliens Kunze, little ebony spleenwort, blackstem spleenwort, p. 30
A. rhizophyllum L., walking fern [**S:** *Camptosorus rhizophyllus* (L.) Link, incl. f. *auriculatum* Hoffm.] (Key and Redfearn, 1973; Wagner, 1954), p. 32
A. ruta-muraria L., wall-rue, p. 30
var. cryptolepis (Fern.) Wherry
A. trichomanes L., maidenhair spleenwort, p. 30
ssp. trichomanes (Moran, 1982)

CAMPTOSORUS (see ASPLENIUM)

BLECHNACEAE, chain fern family
[S: POLYPODIACEAE; M: ASPLENIACEAE]

Woodwardia areolata (L.) Moore, netted chain fern, p. 28

DENNSTAEDTIACEAE, bracken family
[S, G: POLYPODIACEAE]

DENNSTAEDTIA, cuplet fern

Dennstaedtia punctilobula (Michaux) Moore, hay-scented fern, p. 20

PTERIDIUM, bracken

Pteridium aquilinum (L.) Kuhn, bracken, p. 21
var. latiusculum (Desv.) Underw.
var. pseudocaudatum (Clute) Heller

DRYOPTERIDACEAE, wood-fern family
[S, G: POLYPODIACEAE; M: ASPLENIACEAE]

ATHYRIUM, glade fern, lady fern

Athyrium filix-femina (L.) Roth, lady fern, p. 34
ssp. angustum (Willd.) R. T. Clausen, northern lady fern [S: var. *michauxii* (Sprengel) Farw., incl. f. *elatius* (Link) Clute, f. *rubellum* (Gilbert) Farw.; G: *A. filix-femina* var. *angustum* (Willd.) Moore; M: *A. angustum* (Willd.) C. Presl] (Lellinger, 1985)
ssp. asplenioides (Michaux) Clausen, southern lady fern [S: var. *asplenioides* (Michaux) Farw.; G: *A. filix-femina* var. *asplenioides* (Michaux) Farw.; M: *A. asplenioides* Michaux] (Lellinger, 1985)
A. pycnocarpon (Sprengel) Tidestrom, narrow-leaved glade fern, narrow-leaved spleenwort, p. 34
A. thelypterioides (Michaux) Desv., silvery spleenwort, silvery glade fern, p. 34

CYSTOPTERIS, bladder fern

Cystopteris bulbifera (L.) Bernh., bulblet fern, bladder fern [**S:** incl. f. *horizontalis* (Lawson) Gilbert] (Blasdell, 1963), p. 37

C. fragilis (L.) Bernh. [**S:** *C. fragilis* var. *fragilis* f. *fragilis*], see excluded taxa

C. protrusa (Weath.) Blasdell, lowland brittle fern, southern fragile fern [**S:** *C. fragilis* (L.) Bernh. var. *protrusa* Weath.] (Lellinger, 1981), p. 37

C. tennesseensis Shaver, Tennessee bladder fern [**S:** *C. fragilis* (L.) Bernh. var. *fragilis* f. *simulans* Weath.] (Blasdell, 1963), p. 36

C. tenuis (Michaux) Desv., Mackay's brittle fern [**S:** *C. fragilis* (L.) Bernh. var. *mackayii* Lawson] (Lellinger, 1981; Moran, 1983), p. 36

DRYOPTERIS, shield fern, wood fern

Dryopteris x *australis* (Wherry) Small [**S:** *D. clintoniana* (D. Eaton) Dowell var. *australis* Wherry], see excluded taxa

D. carthusiana (Villars) H. P. Fuchs, spinulose wood fern [**S:** *D. austriaca* (Jacq.) Woynar var. *spinulosa* (Mueller) Fiori; **G:** *D. spinulosa* (Mueller) Watt] (Fraser-Jenkins, 1980), p. 40

***D. celsa** (W. Palmer) Small, log fern (Key, 1982)

D. goldiana (Hook.) A. Gray, Goldie's fern, p. 40

D. intermedia (Muhlenb. ex Willd.) A. Gray, evergreen wood fern, glandular wood fern [**S:** *D. austriaca* (Jacq.) Woynar var. *intermedia* (Muhlenb. ex Willd.) Morton] (Wagner, 1970), p. 40

D. marginalis (L.) A. Gray, marginal shield fern, p. 40

MATTEUCCIA, ostrich fern

Matteuccia struthiopteris (L.) Tod., ostrich fern, p. 27
var. pensylvanica (Willd.) Morton

ONOCLEA, sensitive fern

Onoclea sensibilis L., sensitive fern [S: incl. f. *obtusilobata* (Schk.) Gilbert] (Beitel et al., 1981), p. 27

POLYSTICHUM, holly fern

Polystichum acrostichoides (Michaux) Schott, Christmas fern [S: incl. f. *incisum* (A. Gray) Gilbert] (Wagner et al., 1970), p. 41

WOODSIA, cliff fern

Woodsia obtusa (Sprengel) Torrey, blunt-lobed cliff fern, p. 36

MARSILEACEAE, pepperwort family

MARSILEA, water-clover, pepperwort

♦**Marsilea quadrifolia** L., European water-clover, p. 17
M. vestita Hook. & Grev. [S: *M. mucronata* A. Braun], see excluded taxa

PILULARIA, pillwort

***Pilularia americana** A. Braun, pillwort (Key, 1982)

OPHIOGLOSSACEAE, adder's tongue family

BOTRYCHIUM, grape fern

Botrychium biternatum (Savigny) Underw., sparse-lobed grape fern [S: *B. dissectum* var. *tenuifolium* (Underw.) Farw.] (Wagner, 1961), p. 15

Botrychium dissectum Spreng., cut-leaf grape fern, p. 14
f. dissectum
f. obliquum (Muhlenb.) Fern. [**S, G, M:** var. *obliquum* (Muhlenb.) Clute] (Tryon, 1936)
B. virginianum (L.) Sw., rattlesnake fern, p. 15
var. virginianum

OPHIOGLOSSUM, adder's tongue

***Ophioglossum crotalophoroides** Walter, bulbous adder's tongue (Thomas et al., 1974)
O. engelmannii Prantl, Engelmann's adder's tongue, p. 16
***O. petiolatum** Hook., stalked adder's tongue (Thomas et al., 1974)
O. vulgatum L., p. 16
var. pseudopodum (Blake) Farw., northern adder's tongue
var. pycnostichum Fern., southern adder's tongue

OSMUNDACEAE, royal fern family

OSMUNDA, royal fern

Osmunda cinnamomea L., cinnamon fern, p. 20
O. claytoniana L., interrupted fern, p. 20
O. regalis L., royal fern, p. 18
var. spectabilis (Willd.) A. Gray
f. anomala (Farw.) Harris
f. spectabilis

POLYPODIACEAE, polypody family
(see also ADIANTACEAE, ASPLENIACEAE, BLECHNACEAE, DENNSTAEDTIACEAE, DRYOPTERIDACEAE, THELYPTERIDACEAE)

ADIANTUM, ARGYROCHOSMA, CHEILANTHES, NOTHOLAENA, PELLAEA (see ADIANTACEAE)

ASPLENIUM, CAMPTOSORUS (see ASPLENIACEAE)

ATHYRIUM, CYSTOPTERIS, DRYOPTERIS, MATTEUCCIA, ONOCLEA, POLYSTICHUM, WOODSIA (see DRYOPTERIDACEAE)

DENNSTAEDTIA, PTERIDIUM (see DENNSTAEDTIACEAE)

POLYPODIUM, polypody

Polypodium polypodioides (L.) Watt, resurrection fern, gray polypody, p. 26
var. michauxianum Weath.
P. virginianum L., common polypody [S: *P. vulgare* L. var. *virginianum* (L.) A. A. Eaton] (Shivas, 1961), p. 26

THELYPTERIS (see THELYPTERIDACEAE)

WOODWARDIA (see BLECHNACEAE)

SALVINIACEAE, floating fern family

AZOLLA, mosquito fern

Azolla mexicana C. Presl, mosquito fern, water velvet, p. 17

SALVINIA, floating fern

♦**Salvinia natans** (L.) All., floating fern, water spangles, p. 17

THELYPTERIDACEAE, marsh fern family
[S: POLYPODIACEAE]

PHEGOPTERIS (see THELYPTERIS)

THELYPTERIS, marsh fern

Thelypteris hexagonoptera (Michaux) Weath., broad beech fern
[M: *Phegopteris hexagonoptera* (Michaux) Fée]
(Lellinger, 1985), p. 38
T. palustris Schott, marsh fern, p. 38
var. pubescens (Lawson) Fern.

CLASS EQUISETOPSIDA, horsetails

EQUISETACEAE, horsetail family

EQUISETUM, horsetail, scouring rush

Equisetum arvense L., field horsetail, common horsetail [S: incl. f. *diffusum* (A. A. Eaton) Clute, f. *ramulosum* (Rupr.) Klinge] (Hauke, 1967), p. 11
**E.* x *ferrissii* Clute, see named hybrids
E. hyemale L., winter scouring rush, p. 14
var. affine (Engelm) A. A. Eaton [S: var. *elatum* (Engelm.) Morton, var. *pseudohyemale* (Farw.) Morton] (Hauke, 1963)
E. laevigatum A. Braun, smooth scouring rush [S: *E. kansanum* Schaffner] (Hauke, 1963), p. 12
***E. pratense** Ehrh., meadow horsetail (Jacobs, 1989)

CLASS LYCOPODIOPSIDA, clubmosses

ISOETACEAE, quillwort family

ISOETES, quillwort

Isoetes butleri Engelm., Butler's quillwort, p. 11
I. engelmanii A. Braun, Engelmann's quillwort, p. 10
var. engelmannii
I. melanopoda Gay & Durieu, black-footed quillwort, p. 10
f. melanopoda

LYCOPODIACEAE, clubmoss family

HUPERZIA, clubmoss
[S, G: LYCOPODIUM] (Øllgaard, 1987)

Huperzia lucidula (Michaux) Trev. St. Léon, shining clubmoss, [S, M: *Lycopodium lucidulum* Michaux] (Øllgaard, 1987), p. 7
var. lucidula
H. porophila (Lloyd & Underw.) Holub, rock clubmoss [S: *Lycopodium selago* L. var. *patens* (Beauv.) Desv.; M: *L. porophilum* Lloyd & Underwood] (Waterway, 1986; Øllgaard, 1987), p. 7

LYCOPODIUM, clubmoss (see also HUPERZIA)

Lycopodium dendroideum Michaux, round-branched ground pine [S: *L. obscurum* L. var. *dendroideum* (Michaux) D. Eaton] (Hickey, 1977), p. 7
L. tristachyum Pursh, ground-cedar, p. 8

SELAGINELLACEAE, spikemoss family

SELAGINELLA, spikemoss

Selaginella apoda (L.) Fern., meadow spikemoss, p. 8
***S. eclipes** Buck, hidden spikemoss (Redfearn, 1982)
S. rupestris (L.) Spring, rock spikemoss, p. 8

DIVISION PINOPHYTA, conifers

CUPRESSACEAE, cypress family

JUNIPERUS, juniper

Juniperus ashei Buchholz, Ashe's juniper, p. 46
J. virginiana L., red cedar, p. 45
var. crebra Fern. & Griscom
var. virginiana

PINACEAE, pine family

PINUS, pine

Pinus echinata Miller, short-leaf pine, p. 42
♦**P. nigra** Arnold, Austrian pine, p. 42
var. nigra
♦**P. virginiana** Miller, scrub pine, p. 44

TAXODIACEAE, bald cypress family

TAXODIUM, bald cypress

Taxodium distichum (L.) Rich., bald cypress, p. 44
var. distichum [S: incl. f. *confusum* Palmer & Steyermark]
(Hardin, 1971)

DIVISION MAGNOLIOPHYTA, flowering plants

CLASS MAGNOLIOPSIDA, dicots

ACANTHACEAE, acanthus family

DICLIPTERA

Dicliptera brachiata (Pursh) Sprengel, p. 1380

JUSTICIA

Justicia americana (L.) M. Vahl, water willow, p. 1378
J. ovata (Walter) Lindau, p. 1380
var. ovata

RUELLIA, ruellia

Ruellia humilis Nutt., wild petunia, fringeleaf ruellia, p. 1376
(The infraspecific taxonomy of *R. humilis* has not been studied in detail and while the three floras (**S, G, M:**) disagree widely on recognition of varieties and forms, there is no authoritative monograph to follow. Therefore the nomenclature of **S:** is followed here out of convenience. Both **G:** and Long (1970) have indicated that all forms and varieties within this polymorphic species are of dubious value.)

(*Ruellia humilis*, continued)

var. expansa Fern. [**G:** *R. humilis*; **M:** *R. humilis* var. *longiflora* (A. Gray) Fern]

var. frondosa Fern. [**G:** *R. humilis*; **M:** *R. humilis* var. *humilis*]

var. humilis [**G:** *R. humilis*]

f. grisea Fern. [**G:** *R. humilis*; **M:** *R. humilis* var. *humilis*]

f. humilis

var. longiflora (A. Gray) Fern. [**G:** *R. humilis*]

f. alba (Steyerm.) Steyerm. [**M:** *R. humilis* var. *humilis*]

f. longiflora

R. pedunculata Torrey ex A. Gray, wild petunia, p. 1376

ssp. pedunculata

f. baueri Steyerm.

f. pedunculata

R. strepens L., wild petunia, smooth ruellia, limestone ruellia [**S, M:** incl. f. *cleistantha* (A. Gray) McCoy] (Long and Uttal, 1962; Long, 1970), p. 1375

f. alba Steyerm. [**M:** *R. strepens*] (the validity of maintaining the white-flowered form has not been studied)

f. strepens

ACERACEAE, maple family

ACER, maple

Acer negundo L., box elder, ash-leaved maple, p. 1018

var. interius (Britton) Sarg.

var. negundo

var. texanum Pax [**M:** *A. negundo*] (the infraspecific taxonomy of *A. negundo* is poorly understood and requires further study)

var. violaceum (Kirchner) Jaeger [**M:** *A. negundo*] (see note under var. *texanum*) (note that the epithet var. *violaceum* is sometimes credited to a Jon Miller of Bristol, who apparently published the name in 1826 in a nursery catalogue; a copy of this publication

(*Acer negundo*, continued)
was not available for consultation, and we have retained Kirchner's epithet)

Acer rubrum L., red maple (the infraspecific taxonomy of *A. rubrum* is poorly understood and requires further study), p. 1016
- **var. drummondii** (Hook. & Arn. ex Nutt.) Sarg.
  - **f. drummondii**
  - **f. rotundata** Sarg.
- **var. rubrum**
  - **f. rubrum**
  - **f. tomentosum** (Desf.) Dansereau
- **var. trilobum** Torrey & A. Gray ex K. Koch

A. saccharinum L., silver maple, soft maple, p. 1018

A. saccharum Marshall, sugar maple, hard maple, p. 1012
- **ssp. floridanum** (Chapman) Desmarais, southern sugar maple [**S:** *A. saccharum* var. *floridanum* (Chapman) Small & A. A. Heller; **M:** *A. floridanum* (Chapman) Pax] (Desmarais, 1952)
- **ssp. nigrum** (Michaux f.) Desmarais, black maple [**S:** *A. nigrum* Michaux f., incl. f. *pubescens* Deam; **G, M:** *A. nigrum*] (Desmarais, 1952; Voss, 1985b)
- **ssp. saccharum** [**S, G:** incl. *A. saccharum* f. *glaucum* (Schmidt) Pax] (Desmarais, 1952)
  - **f. saccharum**
- **ssp. schneckii** (Rehder) Desmarais [**S:** *A. saccharum* f. *rugelii* (Pax) E. J. Palmer & Steyerm., f. *schneckii* (Rehder) Deam; **G:** *A. saccharum* f. *schneckii* (Rehder) Deam; **M:** *A. saccharum* var. *schneckii* Rehder] (Desmarais, 1952)

AIZOACEAE, fig-marigold family
(see also MOLLUGINACEAE)

TRIANTHEMA, sea purslane

♦**Trianthema portulacastrum** L., sea purslane, horse purslane, p. 632

AMARANTHACEAE, amaranth family

AMARANTHUS, pigweed

Amaranthus albus L., tumbleweed, p. 624
var. albus
var. pubescens (Uline & Bray) Fern.
♦**A. arenicola** I. M. Johnston, sandhills pigweed [S: *A. torreyi* (A. Gray) Benth.] (Sauer, 1955), p. 622
A. blitoides S. Watson, tumbleweed, prostrate amaranth, spreading pigweed [S, G, M: *A. graecizans* L.] (Sauer and Davidson, 1961), p. 624
♦**A. caudatus** L., purple amaranth, love-lies-bleeding, tassel flower, p. 622
A. hybridus L., green amaranth, slender pigweed, p. 623
♦**A. palmeri** S. Watson, p. 622
♦**A. powellii** S. Watson, p. 624
A. retroflexus L., rough green amaranth, rough pigweed, p. 623
A. rudis J. Sauer, water hemp [S: *A. tamariscinus* Nutt.] (Sauer, 1972), p. 621
♦**A. spinosus** L., spiny pigweed, thorny amaranth, careless weed, p. 622
*♦**A. tricolor** L., Chinese spinach, Malabar spinach (Mühlenbach, 1979)
A. tuberculatus (Moq.) J. Sauer, water hemp, tall water hemp, p. 621

CELOSIA

♦**Celosia argentea** L., cockscomb, p. 620
var. cristata (L.) Kuntze

FROELICHIA, cottonweed, snake-cotton

Froelichia floridana (Nutt.) Moq., field cottonweed, field snake-cotton, p. 627
var. campestris (Small) Fern.
F. gracilis (Hook.) Moq., slender cottonweed, slender snake-cotton, p. 627

S: Steyermark G: Great Plains Flora M: Mohlenbrock

IRESINE

Iresine rhizomatosa Standley, bloodleaf, p. 626

TIDESTROMIA

♦**Tidestromia lanuginosa** (Nutt.) Standley, p. 626

ANACARDIACEAE, cashew family

COTINUS, smoke tree

Cotinus obovatus Raf., American smoke tree, p. 999

RHUS, sumac
(see also TOXICODENDRON)

Rhus aromatica Aiton, fragrant sumac, polecat bush, p. 1002
- **var. aromatica** [**S:** incl. var. *illinoensis* (E. Greene) Rehder] (the validity of var. *illinoensis* requires further study; see **G:** for discussion)
- **var. serotina** (E. Greene) Rehder (note that there is no consensus on whether to maintain this taxon as a variety of *R. aromatica* or *R. trilobata* Nutt., or even whether to maintain the latter as a separate species or as a variety of *R. aromatica*; see **G:** and Spellman and Dunn (1965) for discussion)

R. copallina L., dwarf sumac, winged sumac, shining sumac, p. 1000
- **var. latifolia** Engler [**G, M:** *R. copallina*] (the validity of this taxon has not been examined critically)

R. glabra L., smooth sumac, p. 1000

♦**R. typhina** L., staghorn sumac, p. 1000
- **f. dissecta** Rehder, dissected staghorn sumac

TOXICODENDRON, poison ivy, poison oak [S: RHUS] (Gillis, 1971)

Toxicodendron radicans (L.) Kuntze, poison ivy [S: *Rhus radicans* L.] (Gillis, 1971), p. 1003

ssp. negundo (E. Greene) Gillis [S: *Rhus radicans* var. *vulgaris* (Michaux) DC. f. *negundo* (E. Greene) Fern.] (Gillis, 1971)

***ssp. pubens** (Engelm. ex S. Watson) Gillis (Gillis, 1971)

ssp. *radicans* x ssp. *pubens* (Engelm. ex S. Watson) Gillis [S: *Rhus radicans* L. var. *radicans* f. *hypomalaca* Fern.], see excluded taxa

T. toxicarium (Salisb.) Gillis, eastern poison oak [S: *Rhus toxicodendron* L.] (Gillis, 1971), p. 1006

ANNONACEAE, custard apple family

ASIMINA

Asimina triloba (L.) Dunal, pawpaw, p. 671

APIACEAE (UMBELLIFERAE), carrot family

AEGOPODIUM

♦**Aegopodium podagraria** L., goutweed, p. 1136

AMMI

♦**Ammi majus** L., bishop's weed, p. 1135

ANETHUM

♦**Anethum graveolens** L., dill, p. 1141

ANGELICA, angelica

Angelica venenosa (Greenway) Fern., angelica, wood angelica, hairy angelica, p. 1144

ANTHRISCUS

♦**Anthriscus caucalis** M. Bieb., chervil [S: *A. scandicina* (G. Weber) Mansf.] (Hedge and Lamond, 1972), p. 1125

APIUM

♦**Apium graveolens** L., celery, p. 1130

BERULA, water parsnip

***Berula erecta** (Hudson) Cov. (Gremaud, 1988)
var. incisum (Torrey) Cronq.

BUPLEURUM, thoroughwax

♦**Bupleurum rotundifolium** L., thoroughwax, hare's ear, p. 1132

CARUM

♦**Carum carvi** L., caraway, p. 1135

CHAEROPHYLLUM, chervil

Chaerophyllum procumbens (L.) Crantz, wild chervil, p. 1124
var. procumbens
var. shortii Torrey & A. Gray [M: *C. procumbens*] (the validity of this taxon has not been evaluated critically)
C. tainturieri Hook., wild chervil, p. 1125
var. dasycarpum S. Watson
var. tainturieri [S: incl. *C. tainturieri* var. *floridanum* J. Coulter & Rose; *C. texanum* J. Coulter & Rose] (Mathias and Constance, 1951)

CICUTA, water hemlock

Cicuta maculata L., common water hemlock, spotted cowbane
[incl. var. *curtissii* (J. Coulter & Rose) Fern]
(Mulligan, 1980; Christ, 1981), p. 1134
***var. bolanderi** (S. Watson) G. Mulligan (Mulligan, 1980)
var. maculata

CONIUM

♦**Conium maculatum** L., poison hemlock, p. 1129

CORIANDRUM

♦**Coriandrum sativum** L., coriander, p. 1129

CRYPTOTAENIA, honewort

Cryptotaenia canadensis (L.) DC., honewort, wild chervil, p. 1134

CYNOSCIADIUM
(see also LIMNOSCIADIUM)

Cynosciadium digitatum DC., p. 1140

DAUCUS, carrot

♦**Daucus carota** L., wild carrot, Queen Anne's lace, p. 1147
ssp. carota
f. epurpuratus Farw.
f. carota
f. roseus Millsp.
D. pusillus Michaux, small wild carrot, p. 1148

ERIGENIA, harbinger of spring

Erigenia bulbosa (Michaux) Nutt., harbinger of spring, pepper and salt, p. 1129

ERYNGIUM, eryngo

Eryngium prostratum Nutt., p. 1122
E. yuccifolium Michaux, rattlesnake master, button snakeroot, p. 1122

FALCARIA

♦**Falcaria vulgaris** Bernh., sickleweed [S, G: *F. sioides* (Wibel) Asch.] (as noted by several authors of Old World treatments (cf. Pesmen, 1972), the basionym *Drepanophyllum sioides* Wibel was not validly published), p. 1135

FOENICULUM

♦**Foeniculum vulgare** Miller, fennel, p. 1141

HERACLEUM

Heracleum sphondylium L., cow parsnip, masterwort, p. 1147
ssp. montanum (Schleicher ex Gaudin) Briq. [S: *H. maximum* Bartram; M: *H. lanatum* Michaux] (Brummitt, 1971)

HYDROCOTYLE, water pennywort

Hydrocotyle verticillata Thunb., p. 1121
var. verticillata

LEVISTICUM

♦**Levisticum officinale** Koch, lovage [S: *L. paludapifolium* (Lam.) Asch.] (there is confusion surrounding the proper name for this taxon; apparently the combination *L. paludapifolium* was never validly published, although it may be based upon the oldest basionym in the group), p. 1146

S: Steyermark G: Great Plains Flora M: Mohlenbrock

LIGUSTICUM

Ligusticum canadense (L.) Britton, lovage, angelico, p. 1141

LIMNOSCIADIUM
[S: CYNOSCIADIUM]
(Mathias and Constance, 1941)

Limnosciadium pinnatum (DC.) Mathias & Constance [S: *Cynosciadium pinnatum* DC.] (Mathias and Constance, 1941), p. 1140

LOMATIUM, wild parsley

Lomatium foeniculaceum (Nutt.) J. Coulter & Rose, hairy parsley, p. 1146
ssp. daucifolium (Nutt. ex Torrey & A. Gray) Theob. [S: *L. foeniculaceum*] (Theobald, 1966)

OSMORHIZA, sweet cicely

Osmorhiza claytonii (Michaux) C. B. Clarke, sweet cicely, woolly sweet cicely, p. 1126
O. longistylis (Torrey) DC., anise root, sweet anise, smooth sweet cicely [S: incl. var. *brachycoma* S. F. Blake, var. *villicaulis* Fern.; G, M: incl. var. *villicaulis*] (Lowry and Jones, 1984), p. 1126

OXYPOLIS, hog fennel

Oxypolis rigidior (L.) Raf., cowbane, p. 1144
var. ambigua (Nutt.) Robinson
var. rigidior

PASTINACA, parsnip

♦**Pastinaca sativa** L., parsnip, wild parsnip, p. 1146

PERIDERIDIA

Perideridia americana (Nutt. ex DC.) Reichb., p. 1136

POLYTAENIA

Polytaenia nuttallii DC., prairie parsley, p. 1146

PTILIMNIUM, mock bishop's weed

Ptilimnium capillaceum (Michaux) Raf., p. 1138
P. costatum (Elliott) Raf., p. 1140
P. nuttallii (DC.) Britton, p. 1138

SANICULA, black snakeroot, sanicle

Sanicula canadensis L., p. 1121
var. canadensis
var. grandis Fern. [**G, M:** *S. canadensis*] (Pryer and Phillippe, 1989)
S. odorata (Raf.) Pryer & Phillippe [**S, G, M:** *S. gregaria* E. Bickn.] (Pryer and Phillippe, 1989), p. 1121
S. smallii E. Bickn., p. 1122

SIUM

Sium suave Walter, water parsley, water parsnip, p. 1136

SPERMOLEPIS, scale-seed

Spermolepis divaricata (Walter) Britton, forked scale-seed, p. 1130
S. echinata (Nutt.) A. A. Heller, p. 1130
S. inermis (Nutt.) Mathias & Constance, p. 1130

TAENIDIA

Taenidia integerrima (L.) Drude, yellow pimpernel, p. 1136

S: Steyermark **G:** Great Plains Flora **M:** Mohlenbrock

THASPIUM, meadow parsnip

Thaspium barbinode (Michaux) Nutt., p. 1142
T. trifoliatum (L.) A. Gray, p. 1142
var. flavum S. F. Blake
var. trifoliatum

TORILIS, hedge parsley

***♦Torilis arvensis** (Hudson) Link, hedge parsley, hemlock chervil [S, M: *T. japonica* (Houtt.) DC.] (Howell, 1962; Mühlenbach, 1979)
T. japonica (Houtt.) DC., see excluded taxa
♦T. nodosa (L.) Gaertner, p. 1128

TREPOCARPUS

***♦Trepocarpus aethusae** Nutt. ex DC. (Oskins, 1981; Doolen, 1984)

ZIZIA, golden Alexanders

Zizia aptera (A. Gray) Fern., golden Alexanders, heart-leaved meadow parsnip, p. 1132
Z. aurea (L.) Koch, golden Alexanders, meadow parsnip, p. 1132

APOCYNACEAE, dogbane family

AMSONIA, blue star

Amsonia ciliata Walter, ciliate blue star, p. 1195
var. filifolia Alph. Wood (note that the combination *A. ciliata* "var. *ciliolata* (A. DC.) Lemke & Ayers," listed by E. Smith (1988) as the correct name for this taxon, has not been validly published)
A. illustris Woodson, shining blue star, p. 1195

Amsonia tabernaemontana Walter, blue star, willow amsonia, p. 1195
- **var. gattingeri** Woodson [**G:** *A. tabernaemontana*] (the validity of maintaining infraspecific taxa in this species requires further study)
- **var. salicifolia** (Pursh) Woodson [**G:** *A. tabernaemontana*] (see note above)
- **var. tabernaemontana**

APOCYNUM, dogbane, Indian hemp

Apocynum androsaemifolium L., spreading dogbane, pink-flowered dogbane, p. 1198
- **var. androsaemifolium**

A. cannabinum L., Indian hemp, prairie dogbane, p. 1198
- **var. cannabinum**
- **var. pubescens** (Mitchell) A. DC. [**G, M:** *A. cannabinum*] (the validity of maintaining infraspecific taxa in this species requires further study; see Rosatti (1989) for discussion)

A. medium E. Greene (note that nomenclature and taxonomy of this taxon require further study; it is considered by most authors to represent the widespread, fertile hybrid, *A. androsaemifolium* x *A. cannabinum*; several workers have pointed out that the name *A.* x *floribundum* E. Greene has priority over *A. medium*, if these should prove to represent the same taxon), p. 1198

A. sibiricum Jacq. [**G:** *A. cannabinum*] (Woodson, 1930, 1938; Rosatti, 1989), p. 1200
- **var. cordigerum** (E. Greene) Fern. [**G:** *A. cannabinum*] (Woodson, 1930, 1938; Rosatti, 1989)
- **var. sibiricum**

TRACHELOSPERMUM

Trachelospermum difforme (Walter) A. Gray, climbing dogbane, p. 1196

VINCA, periwinkle

♦**Vinca minor** L., common periwinkle, myrtle, p. 1196

AQUIFOLIACEAE, holly family

ILEX, holly

Ilex decidua Walter, possum haw, deciduous holly, p. 1007
I. opaca Sol., American holly, p. 1006
var. opaca
f. opaca
I. verticillata (L.) A. Gray, winterberry, black alder, p. 1007
var. padifolia (Willd.) Torrey & A. Gray

ARALIACEAE, ginseng family

ARALIA, spikenard

Aralia nudicaulis L., wild sarsaparilla, p. 1114
A. racemosa L., American spikenard, p. 1112
A. spinosa L., Hercules' club, devil's walking stick, tear-blanket, p. 1112

HEDERA, ivy

♦**Hedera helix** L., English ivy, p. 1114

PANAX, ginseng

Panax quinquefolius L., American ginseng, ginseng, p. 1114

ARISTOLOCHIACEAE, birthwort family

ARISTOLOCHIA, birthwort

Aristolochia serpentaria L., Virginia snakeroot, p. 573
var. hastata (Nutt.) Duchartre
var. serpentaria
A. tomentosa Sims, woolly pipe-vine, Dutchman's pipe, p. 573

ASARUM

Asarum canadense L., wild ginger, p. 572

ASCLEPIADACEAE, milkweed family

ASCLEPIAS, milkweed

Asclepias amplexicaulis Small, sand milkweed, bluntleaf milkweed, p. 1207
A. hirtella (Pennell) Woodson, prairie milkweed, tall green milkweed (note that Farmer and Bell (1985) reduced this taxon to subspecific status as *A. longifolia* Michaux ssp. *hirtella* (Pennell) Farmer & C. Bell, but this requires further study), p. 1208
A. incarnata L., swamp milkweed, p. 1204
ssp. incarnata
f. albiflora Heller [G: *A. incarnata*] (the validity of this taxon has not been evaluated critically)
f. incarnata
A. meadii Torrey ex A. Gray, Mead's milkweed, p. 1207
A. perennis Walter, white milkweed, p. 1206
A. purpurascens L., purple milkweed, p. 1204
A. quadrifolia Jacq., whorled milkweed, fourleaf milkweed, p. 1206
A. stenophylla A. Gray, narrow-leaved milkweed, p. 1208
***♦A. subverticillata** (A. Gray) Vail, poison milkweed (Mühlenbach, 1979)
A. sullivantii Engelm. ex A. Gray, smooth milkweed, prairie milkweed, p. 1206

Asclepias syriaca L., common milkweed [S, M: incl. var. *kansana* (Vail) E. J. Palmer & Steyerm.] (Sparrow, 1946; Woodson, 1954), p. 1206

A. tuberosa L., butterfly weed, chigger flower, pleurisy root, p. 1203

ssp. interior Woodson [S: *A. tuberosa* var. *interior* (Woodson) Shinn., incl. f. *lutea* (Clute) Steyerm.] (Woodson, 1954, 1964) (note that the transfer of ssp. *interior* to varietal status was relatively arbitrary)

A. variegata L., variegated milkweed, p. 1206

A. verticillata L., whorled milkweed, horsetail milkweed, p. 1208

A. viridiflora Raf., green milkweed [S: incl. var. *lanceolata* (Ives) Torrey, var. *linearis* (A. Gray) Fern.] (Woodson, 1954), p. 1202

A. viridis Walter, green-flowered milkweed, spider milkweed, p. 1202

CYNANCHUM, sand vine

Cynanchum laeve (Michaux) Pers., angle-pod, sand vine, climbing milkweed, blue vine, p. 1210

GONOLOBUS, angle-pod
[S, G, M: MATELEA]
(Woodson, 1941; Rosatti, 1989)

Gonolobus gonocarpus (Walter) Perry [S, G, M: *Matelea gonocarpa* (Walter) Shinn.] (Woodson, 1941; Rosatti, 1989), p. 1211

MATELEA, climbing milkweed
(see also GONOLOBUS)

Matelea baldwyniana (Sweet) Woodson, p. 1211

M. decipiens (Alexander) Woodson, p. 1211

M. obliqua (Jacq.) Woodson, p. 1211

ASTERACEAE (COMPOSITAE), daisy family

ACHILLEA, yarrow, milfoil

Achillea millefolium L., yarrow, common milfoil, nosebleed, p. 1599

var. lanulosa (Nutt.) Piper ex Piper & Beattie [**S:** *A. millefolium* ssp. *lanulosa* (Nutt.) Piper] (Piper (April 1901) published the trinomial *Achillea millefolium lanulosa* without formal designation of a rank. According to Article 35.2 of the latest International Code of Botanical Nomenclature (Greuter et al., 1988), taxa published after 1890 that are not assigned a rank are validly published, but the first author assigning a rank to such a taxon is to be followed and cited as authority for the combination. The earliest subsequent usage of this trinomial was by Piper and Beattie (May 1901), who attributed the combination to Piper and assigned it the rank of variety.)

♦**var. millefolium**

f. millefolium

f. roseum Rand & Redf. [**M:** *A. millefolium* var. *millefolium*] (Rousseau, 1938)

ACMELLA [S: SPILANTHES] (Jansen, 1985)

Acmella oppositifolia (Lam.) R. Jansen [**S:** *Spilanthes americana* (L. f.) Hieron.] (Jansen, 1985), p. 1564

var. repens (Walter) R. Jansen [**S:** *Spilanthes americana* var. *repens* (Walter) A. Moore] (Jansen, 1985)

AGERATUM, ageratum

♦**Ageratum conyzoides** L., p. 1468

ssp. conyzoides

AGOSERIS (see MICROSERIS)

AMBROSIA, ragweed
[S: incl. FRANSERIA] (Payne, 1964)

♦**Ambrosia acanthicarpa** Hook., annual bursage [S: *Franseria acanthicarpa* (Hook.) Cov.] (Payne, 1964), p. 1541

A. artemisiifolia L., common ragweed, bitter weed, Roman wormwood, hog weed [S: incl. var. *elatior* (L.) Descourt. f. *elatior*, var. *elatior* f. *villosa* Fern. & Griscom] (Payne, 1970), p. 1538

A. bidentata Michaux, ragweed, lanceleaf ragweed, southern ragweed, p. 1537

A. psilostachya DC., western ragweed [S: *A. coronopifolia* Torrey & A. Gray] (Payne, 1970), p. 1540

♦**A. tomentosa** Nutt., perennial bursage [S: *Franseria discolor* Nutt.] (Payne, 1964), p. 1541

A. trifida L., giant ragweed, horse weed, great ragweed, buffalo weed [S: incl. var. *texana* Scheele, var. *trifida* f. *integrifolia* (Muhlenb.) Fern., var. *trifida* f. *trifida*; G, M: incl. var. *texana*] (Payne, 1970), p. 1538

AMPHIACHYRIS, broomweed, snakeweed
[S, G: GUTIERREZIA] (Lane, 1979, 1982)

Amphiachyris dracunculoides (DC.) Nutt., broom snakeroot, broomweed [S, G: *Gutierrezia dracunculoides* (DC.) S. F. Blake] (Lane, 1979), p. 1478

ANAPHALIS, pearly everlasting

♦**Anaphalis margaritacea** (L.) Benth. & Hook. f. ex C. B. Clarke., pearly everlasting, p. 1533

ANTENNARIA, pussytoes

Antennaria neglecta E. Greene, pussytoes, field pussytoes [S: incl. var. *campestris* (E. Greene) Steyerm.] (Bayer and Stebbins, 1982), p. 1532

Antennaria parlinii Fern., pussytoes, plainleaf pussytoes, ladies' tobacco, Indian tobacco [**S, M:** *A. plantaginifolia* (L.) Hook.] (Bayer and Stebbins, 1982), p. 1532
ssp. fallax (E. Greene) Bayer & Stebbins [**S, M:** *A. plantaginifolia* var. *ambigens* (E. Greene) Cronq.] (Bayer and Stebbins, 1982)
ssp. parlinii [**S, M:** *A. plantaginifolia* var. *arnoglossa* (E. Greene) Cronq.] (Bayer and Stebbins, 1982)
A. plantaginifolia (L.) Hook., pussytoes, plainleaf pussytoes, ladies' tobacco, Indian tobacco, p. 1532
A. solitaria Rydb., see excluded taxa

ANTHEMIS, chamomile

♦**Anthemis arvensis** L., corn chamomile, p. 1600
var. agrestis (Wallr.) DC. [**M:** *A. arvensis*] (the value of maintaining this poorly marked variety has not been critically examined and the taxon has not been treated in any of the recent taxonomic literature on European plants, where the species is native)
var. arvensis
♦**A. cotula** L., Mayweed, dog fennel, stinking chamomile, p. 1602
♦**A. tinctoria** L., yellow chamomile, p. 1600
ssp. tinctoria

ARCTIUM, burdock

♦**Arctium minus** (Hill) Bernh., common burdock, p. 1619
f. minus
A. tomentosum Miller, see excluded taxa

ARTEMISIA, wormwood, sage, mugwort

♦**Artemisia absinthium** L., absinthe, common wormwood, p. 1653
♦**A. annua** L., sweet wormwood, annual wormwood, sweet sagewort, p. 1608
♦**A. biennis** Willd., biennial wormwood, p. 1607

Artemisia campestris L., western sagewort, wild wormwood, p. 1607
ssp. caudata (Michaux) H. M. Hall & Clements [S: *A. caudata* Michaux var. *caudata*] (Hall and Clements, 1923; Cronquist, 1955)
♦**A. carruthii** Alph. Wood ex Carruth., p. 1611
A. dracunculus L., silky wormwood [S: *A. glauca* Pallas] (Hall and Clements, 1923; Cronquist, 1955), p. 1607
ssp. dracunculina (S. Watson) H. M. Hall & Clements [S: *A. glauca* var. *dracunculina* (S. Watson) Fern.] (Hall and Clements, 1923)
ssp. glauca (Pallas) H. M. Hall & Clements [S: *A. glauca* var. *glauca*] (Hall and Clements, 1923)
♦**A. frigida** Willd., prairie sagewort, p. 1611
A. ludoviciana Nutt., white sage, western mugwort, p. 1610
var. ludoviciana [S, M: incl. var. *gnaphalodes* (Nutt.) Torrey & A. Gray] (Keck, 1946)
var. mexicana (Willd.) Fern.
♦**A. vulgaris** L., common mugwort, p. 1608
var. glabra Ledeb.
var. latiloba Ledeb.
var. vulgaris

ASTER, aster (see also SOLIDAGO)

Aster x *amethystinus* Nutt., see named hybrids
A. anomalus Engelm., p. 1509
f. albidus Steyerm.
f. anomalus
A. brachyactis S. F. Blake, rayless aster (note that some authors prefer to recognize the rayless asters as a separate genus, *Brachyactis*, in which case the correct name for Missouri plants is *B. ciliata* (Ledeb.) Ledeb. ssp. *angusta* (Lindley) A. G. Jones (cf. Jones, 1989); this situation requires further study), p. 1524
♦**A. commutatus** (Torrey & A. Gray) A. Gray, white prairie aster, p. 1519

Aster cordifolius L., blue wood aster, p. 1510
ssp. cordifolius
var. polycephalus Porter
ssp. sagittifolius (Wedemeyer ex Willd.) A. G. Jones [**S:** *A. cordifolius* var. *moratus* (Shinn.) Shinn., *A. sagittifolius* Wedemeyer ex Willd.; **G, M:** *A. sagittifolius*] (A. Jones, 1980)
A. drummondii Lindley, Drummond aster, p. 1512
ssp. drummondii
A. dumosus L., p. 1519
var. strictior Torrey & A. Gray [**M:** *A. dumosus*] (A. Jones, 1980)
A. ericoides L., wreath aster, p. 1518
var. ericoides
f. caeruleus (Benke) S. F. Blake
f. ericoides
var. prostratus (Kuntze) S. F. Blake [**S:** *A. ericoides* f. *prostratus* (Kuntze) Fern.] (Jones, 1974)
A. fragilis Willd., small white aster, frost flower, [**S, M:** *A. vimineus* Lam.] (Jones, 1984), p. 1520
var. fragilis [**S:** incl. *A. dumosus* var. *dodgei* Fern.] (A. Jones, 1980)
var. subdumosus (Wieg.) A. G. Jones [**S:** *A. vimineus* var. *subdumosus* Wieg.; **M:** *A. vimineus*] (Jones, 1984)
A. furcatus Burgess, forked aster, p. 1508
A. laevis L., smooth aster, p. 1515
var. laevis
f. laevis
f. latifolius (Porter) Shinn.
A. lanceolatus Willd., tall white aster, panicled aster [**S, G, M:** *A. simplex* Willd.] (Semple, 1979; Jones, 1984; Semple and Chmielewski, 1987), p. 1522
***ssp. hesperius** (A. Gray) Semple & Chmielewski [**S, G:** *A. hesperius* A. Gray (Barkley, 1986; Semple and Chmielewski, 1987) (note that this taxon was excluded from Missouri by **S:**)

S: Steyermark **G:** Great Plains Flora **M:** Mohlenbrock

(*Aster lanceolatus*, continued)

ssp. lanceolatus

var. interior (Wieg.) Semple & Chmielewski [**S, G:** *A. simplex* var. *interior* (Wieg.) Cronq.; **M:** *A. simplex*] (Semple and Chmielewski, 1987)

var. lanceolatus [**S, G:** *A. simplex* var. *ramosissimus* (Torrey & A. Gray) Cronq.; **M:** *A. simplex*] (Semple and Chmielewski, 1987)

var. latifolius Semple & Chmielewski [**S, G:** *A. simplex* var. *simplex*; **M:** *A. simplex*] (Semple and Chmielewski, 1987)

A. lateriflorus (L.) Britton, white woodland aster, p. 1520

var. lateriflorus

A. linariifolius L., stiff aster, stiff-leaved aster, flax-leaved aster, p. 1524

var. linariifolius

f. linariifolius

A. novae-angliae L., New England aster, p. 1514

f. novae-angliae

A. oblongifolius Nutt., aromatic aster, oblong-leaved aster [**S, G:** incl. var. *angustatus* Shinn.] (Semple and Ford, 1981), p. 1513

f. oblongifolius

f. roseoligulatus (Benke) Shinn. [**M:** *A. oblongifolius*] (the basis for this color morph has not been investigated)

A. ontarionis Wieg., Ontario aster, p. 1520

A. oolentangiensis Riddell, azure aster, blue devil [**S, M:** *A. azureus* Lindley] (A. Jones, 1983), p. 1509

var. laevicaulis (Fern.) A. G. Jones [**S:** *A. azureus* f. *laevicaulis* Fern.; **M:** *A. azureus*] (A. Jones, 1983) (note that although the type of *A. azureus* f. *laevicaulis* was collected in Illinois (A. Jones, 1983), Jones (1989) more recently stated that all Illinois materials of this species belong in var. *oolentangiensis* (without any reference to var. *laevicaulis*; the validity of this taxon remains to be studied in more detail)

var. oolentangiensis

var. poaceus (Burgess) A. G. Jones [**S:** *A. azureus* var. *poaceus* (Burgess) Fern.; **M:** *A. azureus*] (A. Jones, 1983)

Aster paludosus Dryander, p. 1508
ssp. hemisphericus (Alex.) Cronq.
A. parviceps (Burgess) Mackenzie & Bush, small white aster, p. 1516
A. patens Dryander, spreading aster, purple daisy, p. 1512
***var. gracilis** Hook. [**G:** *A. patens* var. *patentissimus*] (R. Jones, 1980, 1983)
var. patens
var. patentissimus (Lindley) Torrey & A. Gray
A. pilosus Willd., white heath aster, p. 1516
var. pilosus [**S:** incl. var. *demotus* S. F. Blake] (Semple, 1978)
f. pilosus
f. pulchellus Benke
var. platyphyllus (Torrey & A. Gray) S. F. Blake [**M:** *A. pilosus*] (the validity of this weak variety has not been examined in detail)
A. praealtus Poiret, willow-leaved aster, p. 1522
var. angustior Wieg. [**M:** *A. praealtus*] (the validity of this variety has not been examined critically)
var. praealtus
var. subasper (Lindley) Wieg. [**M:** *A. praealtus*] (the validity of this variety has not been examined critically)
***A. pubentior** Cronq., flat-topped white aster (Gremaud, 1988)
A. puniceus L., glossy-leaved aster, p. 1514
var. firmus (Nees) Torrey & A. Gray [**S:** incl. f. *lucidulus* (A. Gray) Fern.; **G:** *A. lucidulus* (A. Gray) Wieg.; **M:** *A. firmus* Nees] (Jones, 1984)
A. sericeus Vent., silky aster, p. 1514
f. sericeus
A. subulatus Michaux
var. ligulatus Shinn., saltmarsh aster [**S:** *A. exilis* Elliott] (Shinners, 1953), p. 1524
A. turbinellus Lindley, p. 1515
A. urophyllus Lindley [**S:** *A. sagittifolius* Wedemeyer ex Willd. f. *hirtellus* (Lindley) Shinn.] (A. Jones, 1980; Jones and Hiepko, 1981), p. 1512

S: Steyermark **G:** Great Plains Flora **M:** Mohlenbrock

ASTRANTHIUM, western daisy

Astranthium integrifolium (Michaux) Nutt., p. 1500
ssp. integrifolium

BALSAMITA [S, G: CHRYSANTHEMUM] (Heywood, 1959a, b; Heywood and Humphries, 1977)

♦**Balsamita major** Desf., costmary, mint geranium [S, G: *Chrysanthemum balsamita* L.] (Heywood, 1959a, b; Heywood and Humphries, 1977), p. 1605
var. tanacetoides (Boiss.) Mold. [S, G: *Chrysanthemum balsamita* L. var. *tanacetoides* Boiss.] (Moldenke, 1938)

BERLANDIERA, green eyes

Berlandiera texana DC., p. 1550

BIDENS, beggar ticks (see also MEGALODONTA)

*♦**Bidens alba** (L.) DC. (Mühlenbach, 1979; Ballard, 1986)
var. radiata (Schultz-Bip.) Ballard
B. aristosa (Michaux) Britton, tickseed sunflower [S, G: incl. *B. polylepis* S. F. Blake] (Wunderlin, 1972; Lipscomb and Smith, 1977), p. 1588
f. aristosa [S: *B. aristosa* var. *fritcheyi* Fern., *B. polylepis* var. *polylepis*, var. *retrorsa* Sherff; G: *B. polylepis*; M: *B. aristosa* var. *retrorsa* (Sherff) Wunderlin f. *involucrata* (Nutt.) Wunderlin] (Lipscomb and Smith, 1977)
f. mutica (A. Gray) Wunderlin [S: *B. aristosa* var. *mutica* A. Gray] (Lipscomb and Smith, 1977)
B. bipinnata L., Spanish needles, p. 1590
B. cernua L., sticktight, nodding bur marigold, p. 1586
var. cernua [S: incl. var. *elliptica* Wieg., var. *integra* Wieg.] (Sherff, 1955)
*♦**B. coronata** (L.) Britton (Mühlenbach, 1979)
B. discoidea (Torrey & A. Gray) Britton, p. 1588

Bidens frondosa L., beggar ticks, sticktight, p. 1587
var. frondosa
B. laevis (L.) Britton, Sterns & Pogg., p. 1585
B. tripartita L., beggar ticks, swamp beggar ticks [**S, G:** *B. comosa* (A. Gray) Wieg., *B. connata* Muhlenb. ex Willd. var. *petiolata* (Nutt.) Farw.; **M:** incl. *B. connata*] (Hall, 1967; Cronquist, 1980; Barkley, 1986) (note that Crowe and Parker (1981) consider *B. connata* to represent a hybrid between *B. cernua* and *B. frondosa*, at least in northwestern Ontario; also that the relationship of the American plants to European plants called *B. tripartita* has not been examined critically; see also Roberts, 1982), pp. 1586, 1587
B. vulgata E. Greene, beggar ticks, sticktight, p. 1587
var. vulgata
f. puberula (Wieg.) Fern. [**M:** *B. vulgata*] (the validity of this taxon, which has also been recognized at the varietal level, has not been evaluated critically)
f. vulgata

BOLTONIA, false starwort, false aster

Boltonia asteroides (L.) L'Hér., p. 1502
var. latisquama (A. Gray) Cronq. [**M:** *B. asteroides*] (Morgan, 1967)
var. recognita (Fern. & Griscom) Cronq. [**S:** incl. var. *microcephala* Fern. & Griscom; **M:** *B. asteroides*] (Morgan, 1967)
B. decurrens (Torrey & A. Gray) Alph. Wood, decurrent false aster [**S:** *B. asteroides* var. *decurrens* (Torrey & A. Gray) Fern. & Griscom] (Schwegman and Nyboer, 1985), p. 1504
B. diffusa Elliott, p. 1504
***var. diffusa** (Morgan, 1967)
var. interior Fern. & Griscom [**M:** *B. diffusa*] (Morgan, 1967) (according to Morgan, all Missouri material represents putative hybrids of intermediate morphology between *B. diffusa* var. *interior* and *B. asteroides* var. *latisquama*)

S: Steyermark **G:** Great Plains Flora **M:** Mohlenbrock

BRICKELLIA [S, G: incl. KUHNIA] (Shinners, 1971; King and Robinson, 1987)

Brickellia eupatorioides (L.) Shinn., false boneset [S, G: *Kuhnia eupatorioides* L.] (Shinners, 1971; King and Robinson, 1987), p. 1468
- **var. eupatoroides**
- **var. corymbulosa** (Torrey & A. Gray) Shinn. [S, G: *Kuhnia eupatoroides* var. *corymbulosa* Torrey & A. Gray; M: *B. eupatoroides*] (Shinners, 1946, 1971)
- **var. texana** (Shinn.) Shinn. [S: *Kuhnia eupatorioides* var. *angustifolia* Raf.; G: *Kuhnia eupatorioides* var. *ozarkana* Shinn., var. *texana* Shinn.; M: *B. eupatorioides*] (Shinners, 1946, 1971; Turner, 1989)

B. grandiflora (Hook.) Nutt., tassel flower, p. 1468

CACALIA, Indian plantain

Cacalia atriplicifolia L., pale Indian plantain, p. 1612
C. muhlenbergii (Schultz-Bip.) Fern., great Indian plantain, p. 1612
C. plantaginea (Raf.) Shinn., Indian plantain [S: *C. tuberosa* Nutt.] (Shinners, 1950b), p. 1614
C. suaveolens L., Indian plantain, p. 1612

CARDUUS, plumeless thistle

♦**Carduus crispus** L., curly thistle, welted thistle, p. 1620
♦**C. nutans** L., musk thistle, nodding thistle, p. 1620
- *ssp. **leiophyllus** (Petrovic) Stoy. & Stef. (McGregor, 1986b) (Missouri collections have not been treated below the species level in any of the previous literature)

CENTAUREA, star thistle, knapweed

Centaurea americana Nutt., American basket flower, p. 1628
♦**C. cyanus** L., cornflower, bachelor's button, blue bottle, p. 1626
♦**C. diffusa** Lam., diffuse knapweed, p. 1654
*♦**C. diluta** Dryander (Mühlenbach, 1979)

♦**Centaurea maculosa** Lam., spotted knapweed [*C. stoebe* L. ssp. *stoebe*] (Mühlenbach, 1979, 1983; Moore and Frankton, 1974), p. 1628
♦**C. melitensis** L., Maltese star thistle, p. 1626
♦**C. nigra** L., knapweed, Spanish buttons, p. 1626
♦**C. nigrescens** Willd., knapweed [**S:** *C. vochinensis* Bernh. ex Reichb.; **M:** *C. dubia* Suter ssp. *vochinensis* (Bernh. ex Reichb.) Hayek] (Moore and Frankton, 1974), p. 1626
♦**C. repens** L., Russian knapweed, p. 1626
♦**C. solstitialis** L., yellow star thistle, Barnaby's thistle, p. 1625

CHAETOPAPPA

Chaetopappa asteroides DC., p. 1500
var. asteroides

CHRYSANTHEMUM
(see BALSAMITA, LEUCANTHEMUM, TANACETUM)

CHRYSOPSIS, golden aster
(see also HETEROTHECA)

Chrysopsis pilosa Nutt., p. 1480

CICHORIUM, chickory

♦**Cichorium intybus** L., common chickory, blue sailors, p. 1629
f. album Neum. [**M:** *C. intybus*] (we have arbitrarily chosen to recognize the white-flowered form, although the validity of maintaining this morph has not been investigated in detail)
f. intybus

CIRSIUM, thistle

Cirsium altissimum (L.) Sprengel, tall thistle, roadside thistle, p. 1622

f. altissimum

f. moorei Steyerm. [G: *C. altissimum*] (we have arbitrarily chosen to recognize the white-flowered form, although the validity of maintaining this morph has not been investigated in detail)

♦**C. arvense** (L.) Scop., Canada thistle, field thistle, p. 1624

var. horridum Wimmer & Grab. [S: *C. arvense* var. *arvense*] (Cronquist, 1955; Moore and Frankton, 1974)

f. horridum

C. carolinianum (Walter) Fern. & B. G. Schubert, p. 1622

C. discolor (Muhlenb. ex Willd.) Sprengel, field thistle, p. 1621

f. albiflorum (Britton) House

f. discolor

C. muticum Michaux, swamp thistle, p. 1624

f. muticum

*♦**C. texanum** Buckley, Texas thistle (Mühlenbach, 1979)

var. texanum

C. undulatum (Nutt.) Sprengel, wavy-leaved thistle [S: incl. var. *megacephalum* (A. Gray) Fern.] (Ownbey, 1952), p. 1621

♦**C. vulgare** (Savi) Ten., bull thistle, p. 1621

CONYZA [S: ERIGERON] (Cronquist, 1943)

Conyza canadensis (L.) Cronq., horse weed, Canada fleabane, hog weed [S: *Erigeron canadensis* L.] (Cronquist, 1943, 1947), p. 1529

var. canadensis

var. pusilla (Nutt.) Cronq. [S: *Erigeron pusillus* Nutt.] (Cronquist, 1947)

C. ramosissima Cronq., dwarf fleabane, spreading fleabane [S: *Erigeron divaricatus* Michaux] (Cronquist, 1943), p. 1529

COREOPSIS, tickseed, coreopsis

Coreopsis grandiflora Hogg ex Sweet, bigflower coreopsis, p. 1581
var. grandiflora
f. grandiflora
var. harveyana (A. Gray) Sherff
f. harveyana
C. lanceolata L., tickseed coreopsis [S: incl. var. *villosa* Michaux] (Smith, 1976a), p. 1582
C. palmata Nutt., finger coreopsis, p. 1582
C. pubescens Elliott, star tickseed, p. 1582
var. pubescens
C. tinctoria Nutt., plains coreopsis, calliopsis, p. 1581
var. tinctoria [S: incl. *C. cardaminifolia* (DC.) Torrey & A. Gray, *C. tinctoria* f. *atropurpurea* (Hook.) Fern.] (Parker, 1973; Smith, 1976a)
C. tripteris L., tall tickseed, tall coreopsis [S: incl. var. *deamii* Standley] (Smith, 1976a), p. 1584

COSMOS, cosmos

♦**Cosmos bipinnatus** Cav., p. 1591
*♦**C. parviflorus** (Jacq.) Pers., (Mühlenbach, 1979)
♦**C. sulphureus** Cav., p. 1591

CREPIS, hawk's beard

♦**Crepis capillaris** (L.) Wallr., p. 1644
♦**C. pulchra** L., p. 1644
♦**C. setosa** Haller f., p. 1644
♦**C. tectorum** L., p. 1654

DRACOPSIS

Dracopis amplexicaulis (M. Vahl) Cass., coneflower, p. 1563

DYSSODIA

♦**Dyssodia papposa** (Vent.) A. Hitchc., fetid marigold, p. 1598

ECHINACEA, purple coneflower

Echinacea angustifolia DC., p. 1562
var. angustifolia
E. pallida (Nutt.) Nutt., pale purple coneflower [**S:** incl. f. *albida* Steyerm.] (McGregor, 1968), p. 1562
E. paradoxa (Norton) Britton, p. 1562
var. paradoxa
E. purpurea (L.) Moench, p. 1560
f. liggettii Steyerm.
f. purpurea
***E. simulata** McGregor, pale purple coneflower (McGregor, 1968)

ECLIPTA

Eclipta prostrata (L.) L., yerba de tajo [**S:** *E. alba* (L.) Hassk.] (Koyama and Boufford, 1981), p. 1554

ELEPHANTOPUS, elephant's foot

Elephantopus carolinianus Räusch., p. 1461

ENGELMANNIA

♦Engelmannia pinnatifida A. Gray ex Nutt., Engelmann's daisy, p. 1552

ERECHTITES, fireweed

Erechtites hieracifolia (L.) Raf. ex DC., p. 1611
var. hieracifolia

ERIGERON, fleabane (see also CONYZA)

Erigeron annuus (L.) Pers., daisy fleabane, whitetop fleabane, annual fleabane p. 1526
var. annuus

Erigeron philadelphicus L., Philadelphia fleabane, p. 1526
var. philadelphicus
E. pulchellus Michaux, robin's plantain, p. 1526
var. pulchellus
E. strigosus Muhlenb. ex Willd., daisy fleabane, whitetop fleabane, p. 1528
var. beyrichii (Fischer & C. Meyer) Torrey & A. Gray [**M:** *E. strigosus*] (Cronquist, 1947)
var. discoideus Robb. ex A. Gray [**S:** *E. strigosus* f. *discoideus* (Robb. ex A. Gray) Fern.] (Cronquist, 1947)
var. strigosus
E. tenuis Torrey & A. Gray, p. 1528

EUPATORIUM, thoroughwort

Eupatorium altissimum L., tall thoroughwort, p. 1463
♦**E. capillifolium** (Lam.) Small, dog fennel, p. 1653
E. coelestinum L., mist-flower, blue boneset, wild ageratum, p. 1467
f. coelestinum
E. fistulosum J. Barratt, Joe-pye weed, p. 1463
E. hyssopifolium L., p. 1463
var. calcaratum Fern. & B. G. Schubert
E. incarnatum Walter, p. 1467
E. perfoliatum L., boneset, thoroughwort, p. 1464
var. perfoliatum
f. perfoliatum
E. purpureum L., green-stemmed Joe-pye weed, p. 1463
E. rugosum Houtt., white snakeroot, p. 1466
var. rugosum [**S:** incl. var. *rugosum* f. *villicaule* Fern., var. *tomentellum* (Robinson) S. F. Blake] (Clewell and Wooton, 1971; Cronquist, 1980) (note that Clewell and Wooton (1971), who treated this species under the segregate genus *Ageratina*, also accepted var. *angustatum* (A. Gray) S. F. Blake, which they list as growing in Missouri, but this morph has not been accepted by subsequent authors)
E. semiserratum DC. [**S:** *E. cuneifolium* Willd. var. *semiserratum* (DC.) Fern. & Griscom] (Cronquist, 1980), p. 1463
E. serotinum Michaux, late boneset, p. 1466

Eupatorium sessilifolium L., upland boneset, p. 1463
var. brittonianum Porter
E. x *truncatum* Muhlenb. ex Willd., see named hybrids

EUTHAMIA [S: SOLIDAGO]
(Sieren, 1970; Anderson and Creech, 1975)

Euthamia graminifolia (L.) Nutt., grass-leaved goldenrod [S: *Solidago graminifolia* (L.) Salisb.] (Sieren, 1981), p. 1499
var. nuttallii (E. Greene) W. Stone [S: *Solidago graminifolia* var. *nuttallii* (E. Greene) Fern.; M: *E. graminifolia*] (Sieren, 1981)
E. gymnospermoides E. Greene, grass-leaved goldenrod, viscid euthamia [S: *Solidago gymnospermoides* (E. Greene) Fern., *Solidago graminifolia* var. *media* (E. Greene) S. Harris] (Sieren, 1981), p. 1499
E. leptocephala (Torrey & A. Gray) E. Greene [S: *Solidago leptocephala* Torrey & A. Gray] (Sieren, 1981), p. 1499

FLAVERIA

♦**Flaveria campestris** J. Johnston, p. 1594

FRANSERIA (see AMBROSIA)

GAILLARDIA, gaillardia, blanket flower

Gaillardia aestivalis (Walter) H. Rock, p. 1598
var. flavovirens (C. Mohr) Cronq. [S: *G. lutea* E. Greene; M: *G. aestivalis*] (Rock, 1956; Cronquist, 1977b)
♦**G. pulchella** Foug., Indian blanket, fire-wheels, p. 1598

GALINSOGA, quickweed

♦**Galinsoga parviflora** Cav., p. 1592
♦**G. quadriradiata** Ruíz Lopez & Pavón, fringed quickweed [S: *G. ciliata* (Raf.) S. F. Blake] (Canne, 1977), p. 1594

GAMOCHAETA, cudweed, everlasting
[S, G, M: GNAPHALIUM] (Nesom, 1990)

Gamochaeta purpurea (L.) Cabrera, purple cudweed, early cudweed [S, G, M: *Gnaphalium purpureum* L.] (Nesom, 1990), p. 1534

GNAPHALIUM, cudweed, everlasting
(see also GAMOCHAETA)

Gnaphalium helleri Britton, p. 1534
- **var. micradenium** (Weath.) Mahler [S: *G. obtusifolium* var. *micradenium*] (Mahler, 1975)

G. obtusifolium L., sweet everlasting, fragrant cudweed, old-field balsam, catfoot, p. 1534
- **var. obtusifolium**

GRINDELIA, gumweed, gum plant

Grindelia lanceolata Nutt., spiny-toothed gumweed, p. 1477
- **var. lanceolata**
  - **f. lanceolata**
  - **f. latifolia** Steyerm.

G. squarrosa (Pursh) Dunal, curlytop gumweed, p. 1477
- **var. nuda** (Alph. Wood) A. Gray
- **var. serrulata** (Rydb.) Steyerm.
- **var. squarrosa**

GUTIERREZIA, snakeweed
(see also AMPHIACHYRIS)

♦**Gutierrezia texana** (DC.) Torrey & A. Gray, p. 1653

HAPLOPAPPUS (see PRIONOPSIS)

HELENIUM, sneezeweed

Helenium amarum (Raf.) H. Rock, bitterweed, bitter sneezeweed, yellow dog-fennel, p. 1595
var. amarum
H. autumnale L., sneezeweed, autumn sneezeweed, p. 1596
var. autumnale
var. canaliculatum (Lam.) Torrey & A. Gray [**M:** *H. autumnale*] (the validity of this variety has not been critically evaluated)
var. parviflorum (Nutt.) Fern. [**M:** *H. autumnale*] (the validity of this variety has not been critically evaluated)
H. flexuosum Raf., sneezeweed, purple-headed sneezeweed, p. 1595

HELIANTHUS, sunflower

Helianthus angustifolius L., narrow-leaved sunflower, p. 1569
H. annuus L., common sunflower [**S:** incl. var. *lenticularis* (Dougl.) Steyerm., cv. nanus "Florepleno"] (Heiser et al., 1969), p. 1568
H. x *cinereus* Torrey & A. Gray, see named hybrids
H. decapetalus L., thin-leaved sunflower, pale sunflower, p. 1574
H. divaricatus L., woodland sunflower, p. 1572
H. grosseserratus Martens, sawtooth sunflower [**S:** incl. f. *pleniflorus* Wadm.] (Heiser et al., 1969), p. 1575
H. hirsutus Raf., bristly sunflower [**S:** incl. var. *stenophyllus* Torrey & A. Gray, var. *trachyphyllus* Torrey & A. Gray] (Heiser et al., 1969), p. 1572
H. x *laetiflorus* Pers., see named hybrids
H. maximilianii Schrader, Maximilian sunflower, p. 1572
H. microcephalus Torrey & A. Gray, small wood sunflower, p. 1574
H. mollis Lam., ashy sunflower [**S:** incl. f. *flavidus* Steyerm.] (Heiser et al., 1969), p. 1571
H. occidentalis Riddell, p. 1570
ssp. occidentalis

Helianthus petiolaris Nutt., prairie sunflower, Kansas sunflower, plains sunflower, p. 1569

ssp. petiolaris

H. rigidus (Cass.) Desf., stiff sunflower, prairie sunflower [**S:** *H. laetiflorus* Pers. var. *rigidus* (Cass.) Fern.] (Heiser et al., 1969) (note that although Kartesz and Gandhi (1990) argued that the earliest name for this species is *H. pauciflorus* Nutt., that epithet was treated by Heiser et al. (1969) as being of uncertain application, and the name *H. rigidus* continues to be accepted tentatively here), p. 1570

ssp. rigidus

***ssp. subrhomboideus** (Rydb.) Heiser, D. M. Smith, Clev. & W. Martin [**M:** *H. rigidus*] (Heiser et al., 1969; Mühlenbach, 1983)

H. salicifolius A. Dietr., willow-leaved sunflower, p. 1569

H. silphioides Nutt., p. 1570

H. strumosus L., pale-leaved sunflower, p. 1574

H. tuberosus L., Jerusalem artichoke [**S:** incl. var. *subcanescens* A. Gray] (Heiser et al., 1969; note that while these authors treat the variety *subcanescens* as part of environmental variation in the species, they note that plants determined by **S:** as this variety were actually misdetermined and are *H. strumosus*), p. 1575

HELIOPSIS, ox-eye

Heliopsis helianthoides (L.) Sweet, ox-eye, false sunflower, sunflower heliopsis, p. 1553

***var. helianthoides** (Barkley, 1986)

var. occidentalis (T. Fisher) Steyerm. [**G:** *H. helianthoides* var. *scabra*] (Turner, 1988)

var. scabra (Dunal) Fern., rough ox-eye [**M:** *H. helianthoides*] (Fisher, 1958)

HETEROTHECA, golden aster, camphor weed
[S, G: CHRYSOPSIS]
(Semple, 1977; Semple et al., 1980)

Heterotheca camporum (E. Greene) Shinn. [S: *Chrysopsis villosa* (Pursh) Nutt. ex DC. var. *camporum* (E. Greene) Cronq.] (V. Harms, 1963, 1968), p. 1481
H. canescens (DC.) Shinn. [S: *Chrysopsis villosa* var. *canescens* (DC.) A. Gray; G: *Chrysopsis canescens* (DC.) Torrey & A. Gray] (V. Harms, 1963, 1968), p. 1480
H. latifolia Buckley, p. 1478
var. arkansana B. Wagenkn.
var latifolia
H. villosa (Pursh) Shinn. [M: *H. camporum*] (V. Harms, 1963, 1968), p. 1480
var. angustifolia (Rydb.) V. Harms [S, G: *Chrysopsis villosa* var. *angustifolia* (Rydb.) Cronq.] (V. Harms, 1963, 1968)

HIERACIUM, hawkweed

Hieracium gronovii L., p. 1649
H. longipilum Torrey [S: incl. f. *eglandulosum* E. J. Palmer & Steyerm.] (Deardorff, 1977), p. 1649
H. scabrum Michaux, p. 1649
var. scabrum
var. intonsum Fern. & H. St. John [M: *H. scabrum*] (the validity of this variety has not been critically examined)

HYMENOPAPPUS

Hymenopappus scabiosaeus L'Hér., old plainsman, p. 1594
var. scabiosaeus

HYPOCHAERIS

♦**Hypochaeris radicata** L., cat's ear, p. 1632

INULA

♦**Inula helenium** L., elecampane, p. 1536

IVA, marsh elder

Iva annua L., marsh elder, sump weed [S: *I. ciliata* Willd.] (Jackson, 1960), p. 1536
var. annua
***var. caudata** (Small) R. Jackson (Jackson, 1960)
var. macrocarpa (S. F. Blake) R. Jackson, fossil marsh elder [S: *I. ciliata* var. *macrocarpa* S. F. Blake] (Jackson, 1960)
I. xanthifolia Nutt.

KRIGIA [S: incl. SERINIA] (Shinners, 1947)

Krigia biflora (Walter) S. F. Blake, false dandelion, p. 1630
K. caespitosa (Raf.) Chambers, dwarf dandelion [S: *Serinia oppositifolia* (Raf.) Kuntze] (Shinners, 1947; Chambers, 1973), p. 1628
K. dandelion (L.) Nutt., potato dandelion, dwarf dandelion, p. 1630
K. occidentalis Nutt., dwarf dandelion, p. 1630
K. virginica (L.) Willd., dwarf dandelion, p. 1630

KUHNIA (see BRICKELLIA)

LACTUCA, lettuce

Lactuca canadensis L., wild lettuce [S: incl. var. *canadensis* f. *angustata* Wieg., var. *latifolia* Kuntze f. *exauriculata* Wieg., var. *latifolia* f. *latifolia*, var. *latifolia* f. *villicaulis* Fern., var. *longifolia* (Michaux) Farw. f. *angustipes* Wieg., var. *longifolia* f. *longifolia*, var. *obovata* Wieg. f. *obovata*, var. *obovata* f. *stenopoda* Wieg.] (the complex variation in leaf shape in this species has not been studied in detail and a rational justification for infraspecific taxonomy is unavailable), p. 1639

Lactuca floridana (L.) Gaertner, Florida lettuce, p. 1642
var. floridana
f. floridana
var. villosa (Jacq.) Cronq. [**M:** *L. floridana*] (Cronquist, 1948)
L. hirsuta Muhlenb. ex Nutt., hairy lettuce, p. 1640
var. hirsuta
var. sanguinea (Bigelow) Fern.
L. ludoviciana (Nutt.) Riddell, western wild lettuce, p. 1642
f. ludoviciana
♦**L. saligna** L., willow-leaved lettuce, p. 1639
var. runcinata Gren. & Godron [**S:** *L. saligna* f. *saligna*; **M:** *L. saligna*] (Feráková, 1977) (note that **S:** called the entire-leaved plants f. *ruppiana*, but the type of *L. saligna* has entire leaves; the oldest available name for plants with pinnatifid leaves is var. *runcinata*)
var. saligna [**S:** *L. saligna* f. *ruppiana* (Wallr.) G. Beck] (Feráková, 1977)
*♦**L. sativa** L., lettuce (Mühlenbach, 1983)
♦**L. serriola** L., prickly lettuce [**S:** *L. scariola* L.] (Prince and Carter, 1977), p. 1638
f. integrifolia (Gray) Prince & R. Carter [**S:** *L. scariola* f. *integrifolia* (Bogenh.) G. Beck; **M:** *L. serriola*] (Prince and Carter, 1977)
f. serriola
L. tatarica (L.) C. Meyer, blue lettuce, p. 1642
ssp. pulchella (Pursh) Stebb. [**S:** *L. pulchella* (Pursh) DC.; **G:** *L. oblongifolia* Nutt.] (Stebbins, 1939; Feráková, 1977)

LAPSANA

♦**Lapsana communis** L., nipplewort, p. 1628
ssp. communis

LEUCANTHEMUM [S, G: CHRYSANTHEMUM] (Heywood, 1959a, b; Heywood and Humphries, 1977)

♦**Leucanthemum vulgare** Lam., ox-eye daisy, white daisy [**S, G:** *Chrysanthemum leucanthemum* L.] (Heywood, 1959a, b; Heywood and Humphries, 1977), p. 1604
var. pinnatifidum (Lecoq & Lamotte) Mold. [**S, G:** *Chrysanthemum leucanthemum* var. *pinnatifidum* Lecoq & Lamotte] (Moldenke, 1937)
var. vulgare

LIATRIS, blazing star, gay feather

Liatris aspera Michaux, p. 1472
f. aspera
f. benkei (Macbr.) Fern.
L. cylindracea Michaux, p. 1475
f. cylindracea
L. ligulistylis (Nelson) Schumann, p. 1474
L. mucronata DC., p. 1475
L. punctata Hook., snakeroot, p. 1474
var. nebraskana Gaiser [**M:** *L. punctata*] (Cronquist, 1980)
L. pycnostachya Michaux, button snakeroot, p. 1471
f. hubrichtii E. S. Anderson
f. pycnostachya
***L. scariosa** (L.) Willd. (Cronquist, 1980; Bowles and Wilhelm, 1988)
var. nieuwlandii Lunell
L. spicata (L.) Willd., button snakeroot, p. 1470
f. spicata
L. squarrosa (L.) Michaux, p. 1476
var. glabrata (Rydb.) Gaiser
var. hirsuta (Rydb.) Gaiser [**M:** *L. squarrosa*] (Cronquist, 1980)
var. squarrosa
f. squarrosa
L. squarrulosa Michaux [**S:** *L. scabra* (E. Greene) Schumann] (Cronquist, 1980), p. 1471

LYGODESMIA, skeleton plant

Lygodesmia juncea (Pursh) D. Don, p. 1643

MARSHALLIA, Barbara's buttons

Marshallia caespitosa Nutt. ex DC., p. 1591
var caespitosa
var. signata Beadle & F. Boynton

MATRICARIA, wild chamomile

♦**Matricaria discoidea** DC., pineapple weed [**S, G, M:** *M. matricarioides* (Less.) Porter] (Rauschert, 1974), p. 1604

♦**M. perforata** Mérat, scentless false chamomile [**S:** *M. maritima* L. var. *agrestis* (Knaf) Wilm.; **G:** *M. maritima*] (Rauschert, 1974), p. 1602

♦**M. recutita** L., wild chamomile, false chamomile, German chamomile [**S, G, M:** *M. chamomilla* L.] (Rauschert, 1974), p. 1602

MEGALODONTA [S: BIDENS] (Roberts, 1982, 1985)

Megalodonta beckii (Torrey ex Sprengel) E. Greene, water marigold [**S:** *Bidens beckii* Torrey ex Sprengel] (Roberts, 1982, 1985), p. 1590

MICROSERIS [S: AGOSERIS; M: NOTHOCALAIS] (Cronquist, 1948)

Microseris cuspidata (Pursh) Schultz-Bip., prairie dandelion [**S:** *Agoseris cuspidata* (Pursh) D. Dietr.; **M:** *Nothocalais cuspidata* (Pursh) E. Greene] (Cronquist, 1948), p. 1644

MIKANIA, climbing hempweed

Mikania scandens (L.) Willd., p. 1468

NOTHOCALAIS (see MICROSERIS)

ONOPORDUM, Scotch thistle

♦**Onopordum acanthium** L., Scotch thistle, cotton thistle, p. 1624
ssp. acanthium

PALAFOXIA, Spanish needles

Palafoxia callosa (Nutt.) Torrey & A. Gray, p. 1595

PARTHENIUM

Parthenium hispidum Raf., American feverfew, P. 1553
♦**P. hysterophorus** L., Santa Maria, P. 1552
P. integrifolium L., American feverfew, wild quinine, P. 1552

PICRIS

*♦**Picris echioides** L., ox-tongue (Mühlenbach, 1979)
*♦**P. hieracioides** L., cat's ear (Mühlenbach, 1979)
ssp. hieracioides
♦**P. sprengeriana** (L.) Poiret, bitterweed, p. 1632

PLUCHEA, marsh fleabane

Pluchea camphorata (L.) DC., stinkweed, camphor weed, inland marsh fleabane , p. 1530
P. foetida (L.) DC., marsh fleabane, stinking fleabane, p. 1530
var. foetida

POLYMNIA, leaf cup

Polymnia canadensis L. [S: incl. f. *radiata* (A. Gray) Fassett] (Wells, 1965), p. 1546

Polymnia laevigata Beadle, p. 1547
P. uvedalia (L.) L., bearsfoot, yellow flowered leaf cup [S: incl. var. *densipilis* S. F. Blake] (Wells, 1969), p. 1546

PRENANTHES, rattlesnake root, white lettuce

Prenanthes alba L., white lettuce, rattlesnake root, white snakeroot, p. 1648
P. altissima L., rattlesnake root, tall white lettuce, p. 1648
var. *altissima*, see excluded taxa
var. cinnamomea Fern.
P. aspera Michaux, rattlesnake root, rough white lettuce, p. 1648
P. crepidinea Michaux, rattlesnake root, great white lettuce, p. 1646
P. racemosa Michaux, rattlesnake root, glaucous white lettuce, p. 1646
ssp. racemosa

PRIONOPSIS, goldenweed [S, G HAPLOPAPPUS] (see below)

Prionopsis ciliatus (Nutt.) Nutt. [S, G: *Haplopappus ciliatus* (Nutt.) DC.] (recent, as yet not fully published research has shown that the traditional genus *Haplopappus* is composed of diverse, unrelated elements; for example, *Prionopsis* is closely related to, and perhaps congeneric with *Grindelia*; see Hartman et al. (1987) and Lane et al. (1987) for brief discussions), p. 1500

PYRRHOPAPPUS, false dandelion

Pyrrhopappus carolinianus (Walter) DC., p. 1646
P. grandiflorus (Nutt.) Nutt., see excluded taxa

RATIBIDA, prairie coneflower

Ratibida columnifera (Nutt.) Wooton & Standley, longhead prairie coneflower, prairie coneflower, p. 1563
f. columnifera
f. pulcherrima (DC.) Fern.
R. pinnata (Vent.) Barnhart, grayhead prairie coneflower, drooping coneflower, p. 1563
♦**R. tagetes** (E. James) Barnhart, shortray prairie coneflower, p. 1653

RUDBECKIA, coneflower

Rudbeckia fulgida Aiton, orange coneflower, p. 1559
var. sullivantii (C. L. Boynton & Beadle) Cronq. [**S:** *R. fulgida* var. *speciosa* (Wender.) Perdue] (Cronquist, 1945a)
var. umbrosa (C. L. Boynton & Beadle) Cronq.
R. grandiflora (D. Don) DC., rough coneflower, p. 1557
var. grandiflora
R. hirta L., black-eyed Susan, p. 1558
var. pulcherrima Farw. (note that **S:** also discusses f. *flavescens* Clute and f. *homochroma* Steyerm. and **M:** includes f. *flavescens*, both corolla-color variants, but the disposition of these forms among the varieties has not been examined critically)
R. laciniata L., goldenglow, cutleaf coneflower, p. 1557
var. laciniata
♦**R. maxima** Nutt., p. 1558
R. missouriensis Engelm., Missouri coneflower, p. 1559
R. subtomentosa Pursh, sweet coneflower, p. 1557
f. craigii (Sherff) Fern.
f. subtomentosa
R. triloba L., brown-eyed Susan, p. 1560
var. triloba

SENECIO, ragwort, groundsel

♦**Senecio ampullaceus** Hook., Texas groundsel, p. 1654
S. aureus L., golden ragwort, squaw weed [S: incl. var. *gracilis* (Pursh) Hook., var. *intercursus* Fern.] (Barkley, 1962), p. 1616
S. glabellus Poiret, butterweed, p. 1615
S. obovatus Muhlenb. ex Willd., squaw weed, roundleaf groundsel, p. 1618
S. pauperculus Michaux, northern ragwort [S: incl. var. *balsamitae* (Muhlenb. ex Willd.) Fern.] (Barkley, 1962), p. 1616
S. plattensis Nutt., prairie ragwort, p. 1615
S. pseudaureus Rydb., golden ragwort, squaw weed, p. 1618
var. semicordatus (Mackenzie & Bush) T. Barkley [S: *S. aureus* var. *semicordatus* (Mackenzie & Bush) Greenman] (Barkley, 1962)
***S. tomentosus** Michaux (Barkley, 1980)
♦**S. vulgaris** L., common groundsel, p. 1615

SERINIA (see KRIGIA)

SILPHIUM, rosinweed

Silphium asteriscus L, starry rosinweed, p. 1549
var. scabrum Nutt. (Missouri plants were first classified at the varietal level by Cronquist (1980))
S. integrifolium Michaux, p. 1548
var. deamii Perry [S: *S. integrifolium* f. *deamii* (Perry) Steyerm.; M: *S. integrifolium*] (Settle and Fisher, 1970)
var. integrifolium
var. laeve Torrey & A. Gray
S. laciniatum L., compass plant, rosinweed, p. 1550
var. laciniatum
S. perfoliatum L., cup plant, cup rosinweed, p. 1547
var. perfoliatum
f. perfoliatum
f. petiolatum E. J. Palmer & Steyerm.
S. terebinthinaceum Jacq., prairie dock, p. 1550

SOLIDAGO, goldenrod
(see also EUTHAMIA)

Solidago altissima L., tall goldenrod, p. 1496
- **var. altissima** [**G:** *S. canadensis* L. var. *scabra* (Muhlenb. ex Willd.) Torrey & A. Gray; **M:** *S. canadensis*] (Semple et al., 1984; Nesom, 1989)
- **var. gilvocanescens** (Rydb.) Semple [**S, G:** *S. canadensis* var. *gilvocanescens* Rydb.] (Semple et al., 1984; Nesom, 1989)

S. arguta Aiton, p. 1489
- **var. arguta**
- **var. boottii** (Hook.) E. J. Palmer & Steyerm.
- **var. neurolepis** (Fern.) Steyerm.
- **var. strigosa** (Small) Steyerm.

***S. bicolor** L., silverrod (Cronquist, 1952, 1980) (note that **S:** recognized this species, but excluded it from Missouri)

S. buckleyi Torrey & A. Gray, p. 1486

S. caesia L., blue-stemmed goldenrod, wreath goldenrod, p. 1485

S. drummondii Torrey & A. Gray, p. 1496

S. flexicaulis L., broadleaf goldenrod, p. 1485

S. gattingeri Chapman, p. 1488

S. gigantea Aiton, late goldenrod, tall goldenrod [**S:** incl. var. *leiophylla* Fern.; **G:** incl. var. *serotina* (Kuntze) Cronq.] (Morton, 1984), p. 1496

S. hispida Muhlenb. ex Willd. [**G:** *S. nemoralis*] (this is apparently an error based on a misinterpretation of the name *S. hispida* by Friesner (1933) and Croat (1967); these two species are in different groups within the genus; see Semple and Ringius (1983) or **S:**), p. 1486
- **var. hispida**

S. juncea Aiton, early goldenrod, p. 1489

S. missouriensis Nutt., p. 1488
- **var. fasciculata** Holzinger [**M:** *S. missouriensis*] (Cronquist, 1955)
- var. *missouriensis*, see excluded taxa

Solidago nemoralis Dryander, old-field goldenrod, gray goldenrod, p. 1492

var. longipetiolata (Mackenzie & Bush) E. J. Palmer & Steyerm. [S: *S. nemoralis* var. *decemflora* (DC.) Fern.; M: *S. nemoralis*] (Taylor and Taylor, 1984; Barkley, 1986)

var. nemoralis

S. odora Aiton, sweet goldenrod, fragrant goldenrod, p. 1494

var. odora

S. patula Muhlenb. ex Willd., rough-leaved goldenrod, p. 1492

var. patula

S. petiolaris Aiton, p. 1485

var. angusta (Torrey & A. Gray) A. Gray [S: *S. petiolaris* var. *wardii* (Britton) Fern.; M: *S. petiolaris*] (while most authors agree that two varieties of *S. petiolaris* should be recognized, there is general disagreement on the placement of var. *wardii*; some authors (e.g., Taylor and Taylor, 1984) place it in synonymy with var. *petiolaris*, others (e.g., S, G:) align it with var. *angusta*; further study is needed)

var. petiolaris

S. ptarmicoides (Nees) J. Boivin, white upland aster, sneezewort aster [S: *Aster ptarmicoides* (Nees) Torrey & A. Gray] (Brouillet and Semple, 1981), p. 1524

S. radula Nutt., rough goldenrod, p. 1492

var. laeta (E. Greene) Fern. [M: *S. radula*] (the validity of this variety has not been critically evaluated)

var. radula

var. stenolepis Fern. [M: *S. radula*] (the validity of this variety has not been critically evaluated)

S. riddellii Frank, p. 1498

S. rigida L., stiff goldenrod, rigid goldenrod, p. 1498

***ssp. glabrata** (E. Braun) Heard & Semple (Heard and Semple, 1988)

***ssp. humilis** (Porter) Heard & Semple (Heard and Semple, 1988)

ssp. rigida

Solidago rugosa Miller, rough-leaved goldenrod, rough-stemmed goldenrod, p. 1495
var. aspera (Aiton) Fern.
var. celtidifolia (Small) Fern.
var. rugosa
S. speciosa Nutt., prairie goldenrod, showy goldenrod, p. 1486
var. rigidiuscula Torrey & A. Gray [**S:** *S. speciosa* var. *angustata* Torrey & A. Gray; **M:** *S. speciosa*] (although **S:** included var. *rigidiuscula* as a synonym of var. *angustata*, the latter is actually an extreme form of var. *speciosa* that does not occur in Missouri; the name *angustata* was misinterpreted by Friesner (1933) and Fernald (1950), who **S:** followed; see Cronquist (1980))
var. speciosa
S. ulmifolia Muhlenb. ex Willd., elm-leaved goldenrod, p. 1494
var. palmeri Cronq.
var. ulmifolia

SONCHUS, sow thistle

♦**Sonchus arvensis** L., field sow thistle, perennial sow thistle, p. 1635
ssp. arvensis
ssp. uliginosus (M. Bieb.) Nyman [**S, M:** *S. arvensis* var. *glabrescens* Günther, Grab. & Wimmer] (Boulos, 1973)
♦**S. asper** (L.) Hill, prickly sow thistle, spiny-leaved sow thistle, p. 1636
ssp. asper [**S:** incl. f. glandulosus G. Beck] (Boulos, 1973)
♦**S. oleraceus** L., common sow thistle, p. 1636

SPILANTHES (see ACMELLA)

TAGETES, marigold

♦**Tagetes erecta** L., common marigold, African marigold, p. 1599
*♦**T. patula** L., French marigold (Mühlenbach, 1979)

TANACETUM (S, G: incl. CHRYSANTHEMUM) (Heywood, 1959a, b; Heywood and Humphries, 1977)

♦**Tanacetum parthenium** (L.) Schultz-Bip., feverfew [S, G: *Chrysanthemum parthenium* L.] (Heywood, 1959a, b; Heywood and Humphries, 1977), p. 1605

♦**T. vulgare** L., tansy, common tansy, golden buttons, p. 1605

f. crispum (L.) Hayek

f. vulgare

TARAXACUM, dandelion

♦**Taraxacum erythrospermum** Andrz. ex Besser, red-seeded dandelion [G, M: *T. laevigatum* (Willd.) DC.] (there is widespread disagreement on the correct name for this taxon; pending critical examination of type specimens, the traditional nomenclature for this aggregate of largely apomictic races is followed here, which also agrees with current usage in most European manuals), p. 1634

♦**T. officinale** Weber, common dandelion (the name *T. officinale* has recently been lectotypified (Richards, 1985) based on a Scandinavian endemic that is only distantly related to the widespread, weedy species to which our plants are referrable; unfortunately it is unclear which of the nearly 50 names placed in sect. *Ruderalia* (Kirschner and Štěpánek, 1987) should be used for the introduced, North American plants, and we have continued to use the traditional nomenclature until further study clarifies the situation), p. 1635

THELESPERMA

Thelesperma ambiguum A. Gray, see excluded taxa

T. filifolium (Hook.) A. Gray [S: *T. trifidum* (Poiret) Britton] (Shinners, 1950a; Turner, 1959), p. 1580

var. filifolium

♦**T. megapotamicum** (Sprengel) Kuntze, p. 1580

TRAGOPOGON, goat's beard

♦**Tragopogon dubius** Scop., goat's beard, western salsify, p. 1634
♦**T. porrifolius** L., salsify, vegetable oyster, oyster plant, p. 1632
♦**T. pratensis** L., goat's beard, meadow salsify, p. 1634

VERBESINA, crownbeard, wingstem

Verbesina alternifolia (L.) Britton, yellow ironweed, p. 1578
♦**V. encelioides** (Cav.) Benth. & Hook. f., golden crownbeard, p. 1580
*ssp. **encelioides** (Coleman, 1966; Wagner, 1979)
ssp. **exauriculata** (Robinson & Greenman) J. Coleman [S: *V. encelioides* var. *exauriculata* Robinson & Greenman] (Coleman, 1966)
V. helianthoides Michaux, yellow crownbeard, p. 1578
V. virginica L., white crownbeard, frost weed, tickweed, p. 1578
var. **virginica**

VERNONIA, ironweed

Vernonia arkansana DC. [S: *V. crinita* Raf.] (Jones, 1972), p. 1457
V. baldwinii Torrey, p. 1460
ssp. **baldwinii**
f. **albiflora** E. J. Palmer & Steyerm.
f. **baldwinii**
ssp. **interior** (Small) Faust [S: *V. baldwinii* var. *interior* (Small) B. G. Schubert; M: *V. baldwinii*] (Faust, 1972)
V. fasciculata Michaux, p. 1461
var. **fasciculata**
V. gigantea (Walter) Trel. ex Branner & Cov. [S: *V. altissima* Nutt., incl. f. *alba* Mold., var. *taeniotricha* S. F. Blake] (Urbatsch, 1972) (note that no combination presently exists under *V. gigantea* for the white-flowered f. *alba*), p. 1458
ssp. **gigantea**
**V.* x *illinoensis* Gleason, see named hybrids

Vernonia missurica Raf., p. 1460
f. missurica
**V.* x *peralta* Daniels, see named hybrids

XANTHIUM, cocklebur

♦**Xanthium spinosum** L., spiny cocklebur, p. 1542
X. strumarium L., common cocklebur, p. 1542
var. canadense (Miller) Torrey & A. Gray [S: *X. italicum* Moretti, *X. pensylvanicum* Wallr., *X. speciosum* Kearney, *X. varians* E. Greene, *X. wootonii* Cockerell] (Cronquist, 1945a, 1980)
var. glabratum (DC.) Cronq. [S: *X. chinense* Miller, *X. inflexum* Mackenzie & Bush] (Cronquist, 1945a, 1980)

BALSAMINACEAE, touch-me-not family

IMPATIENS, touch-me-not

♦**Impatiens balsamina** L., balsam, p. 1026
I. capensis Meerb., spotted touch-me-not, p. 1026
f. capensis
I. pallida Nutt., pale touch-me-not, jewelweed, p. 1024
f. dichroma Steyerm.
f. pallida

BERBERIDACEAE, barberry family

BERBERIS, barberry

Berberis canadensis Miller, American barberry, p. 712
♦**B. thunbergii** DC., Japanese barberry, p. 712
♦**B. vulgaris** L., common barberry, p. 712

CAULOPHYLLUM, blue cohosh

Caulophyllum thalictroides (L.) Michaux, blue cohosh, papoose root, p. 711

PODOPHYLLUM, May apple

Podophyllum peltatum L., May apple, mandrake, p. 710
f. deamii Raym. [**M:** *P. peltatum*] (the validity of this taxon has not been examined critically)
f. peltatum

BETULACEAE, birch family [S: CORYLACEAE]

ALNUS, alder

Alnus serrulata (Aiton) Willd., common alder, smooth alder, tag alder [**S:** incl. f. *noveboracensis* (Britton) Fern.] (Furlow, 1979), p. 527

BETULA, birch

Betula nigra L., river birch, red birch, p. 527

CARPINUS, hornbeam

Carpinus caroliniana Walter, blue beech, hornbeam, musclewood, p. 526
ssp. caroliniana
ssp. virginiana (Marshall) Furlow [**S:** *C. caroliniana* var. *virginiana* (Marshall) Fern.; **M:** *C. caroliniana*] (Furlow, 1987)

CORYLUS, hazelnut

Corylus americana Walter, hazelnut, American hazelnut [S, G: incl. var. *americana* f. *missouriensis* (A. DC.) Fern., var. *indehiscens* E. J. Palmer & Steyerm.] (Drumke, 1964; Hardin, 1971) (note that the recognition of infraspecific taxa in this species requires further study), p. 524

OSTRYA, hop hornbeam

Ostrya virginiana (Miller) K. Koch, eastern hop hornbeam, ironwood [S, G: incl. var. *lasia* Fern., var. *virginiana* f. *glandulosa* (Spach) J. F. Macbr.] (Hardin, 1971) (note that the recognition of infraspecific taxa in this species requires further study), p. 526

BIGNONIACEAE, trumpet creeper family

BIGNONIA, cross vine

Bignonia capreolata L., cross vine, quarter vine, p. 1370

CAMPSIS, trumpet creeper

Campsis radicans (L.) Seemann, trumpet creeper, trumpet vine, devil's shoelaces, shoestrings, hell vine, p. 1368

CATALPA, catalpa

♦**Catalpa bignonioides** Walter, southern catalpa, common catalpa, p. 1370

♦**C. ovata** G. Don, Chinese catalpa, p. 1371

C. speciosa Warder ex Engelm., northern catalpa, catawba tree, cigar tree, hardy catalpa, p. 1371

BORAGINACEAE, borage family

AMSINCKIA, fiddleneck, tarweed

♦**Amsinckia lycopsoides** Lehm. ex Fischer & C. Meyer, p. 1253
♦**A. menziesii** (Lehm.) Nelson & J. F. Macbr. [**S:** *A. micrantha* Suksd.] (Cronquist, 1959) (also includes plants reported by Mühlenbach (1979) as *A. hispida* (Ruiz-Leal & Pavón) I. M. Johnston, a name for plants of South American origin that Mühlenbach equated with *A. micrantha*), p. 1253
♦**A. retrorsa** Suksd., p. 1253
♦**A. tessellata** A. Gray, p. 1253

BRUNNERA

*♦**Brunnera macrophylla** (Adams) I. M. Johnston, Siberian bugloss (Dunn, 1982)

BUGLOSSOIDES [**S, G:** LITHOSPERMUM] (Johnston, 1954)

♦**Buglossoides arvense** (L.) I. M. Johnston, corn gromwell, bastard alkanet [**S, G:** *Lithospermum arvense* L.] (Johnston, 1954), p. 1247

COLDENIA (see TIQUILIA)

CYNOGLOSSUM, hound's tongue

♦**Cynoglossum officinale** L., common hound's tongue, p. 1250
C. virginianum L., wild comfrey, giant forget-me-not, p. 1250

ECHIUM, viper's bugloss

♦**Echium vulgare** L., blueweed, blue devil, blue thistle, p. 1244

HACKELIA, beggar's lice, stickseed

Hackelia virginiana (L.) I. M. Johnston, p. 1256

HELIOTROPIUM, heliotrope

*♦**Heliotropium curassavicum** L. (Nelson, 1979a)
var. curassavicum
♦**H. indicum** L., Indian heliotrope, turnsole, p. 1243
H. tenellum (Nutt.) Torrey, p. 1243

LAPPULA, beggar's lice, stickseed

♦**Lappula echinata** Gilib., p. 1256
♦**L. redowskii** (Hornem.) E. Greene [**S, M:** incl. var. *occidentalis* (S. Watson) Rydb.] (Cronquist, 1959; Higgins, 1979) (note that Mühlenbach (1979) reported var. *redowskii* sensu stricto for Missouri), p. 1256

LITHOSPERMUM, puccoon
(see also BUGLOSSOIDES)

Lithospermum canescens (Michaux) Lehm., puccoon, orange puccoon, p. 1248
f. canescens
f. pallidum Steyerm.
L. caroliniense (Walter) MacMillan, puccoon, plains puccoon, p. 1248
ssp. carolinense
L. incisum Lehm., puccoon, yellow puccoon, p. 1247
L. latifolium Michaux, puccoon, American gromwell, p. 1247

MERTENSIA, bluebells

Mertensia virginica (L.) Pers. ex Link, bluebells, Virginia cowslip, p. 1254
- **f. berdii** Mold.
- **f. rosea** Steyerm. [**M:** *M. virginica*] (the validity of this taxon has not been evaluated critically)
- **f. virginica**

MYOSOTIS, forget-me-not

♦**Myosotis scorpioides** L., forget-me-not, common forget-me-not, p. 1252

*♦**M. stricta** Link ex Roemer & Schultes, small-flowered forget-me-not (Christ, 1984a)

M. verna Nutt., scorpion grass [**S:** *M. virginica* (L.) Britton, Sterns, & Pogg.] (Fernald, 1941), p. 1252
- **var. macrosperma** (Engelm.) Chapman [**S:** *M. virginica* var. *macrosperma* (Engelm.) Fern.; **G:** *M. verna*; **M:** *M. macrosperma* Engelm.] (this taxon is here treated at varietal rank, following the reasoning presented by **S:**, but it is obvious from the level of disagreement in various floras concerning this complex that a detailed study of the group is urgently needed)
- **var. verna**

ONOSMODIUM, marbleseed, false gromwell

Onosmodium molle Michaux, p. 1246
- **ssp. hispidissimum** (Mackenzie) Cochr. [**S, M:** *O. hispidissimum* Mackenzie] (Cochrane, 1976)
- **ssp. occidentale** (Mackenzie) Cochr. [**S:** *O. occidentale* Mackenzie] (Cochrane, 1976)
- **ssp. subsetosum** (Mackenzie & Bush) Cochr. [**S:** *O. subsetosum* Mackenzie & Bush] (Cochrane, 1976)

SYMPHYTUM, comfrey

♦**Symphytum officinale** L., common comfrey, p. 1244

TIQUILIA [S: COLDENIA] (Richardson, 1976, 1977)

♦**Tiquilia nuttallii** (Benth. ex Hook.) A. Richardson [**S:** *Coldenia nuttallii* Benth. ex Hook.] (Richardson, 1976, 1977), p. 1243

BRASSICACEAE, mustard family

ALLIARIA

*♦**Alliaria petiolata** (M. Bieb.) Cavara & Grande, garlic mustard [*A. officinalis* Andrz.] (Mohlenbrock, 1979; Henderson, 1980; Nightingale, 1980; Al-Shehbaz, 1988c)

ALYSSUM, alyssum

*♦**Alyssum alyssoides** (L.) L., pale alyssum (Henderson, 1980)
var. alyssoides
*♦**A. desertorum** Stapf (Castaner, 1984b)

ARABIDOPSIS

♦**Arabidopsis thaliana** (L.) Heynh., mouse-ear cress, thale cress, p. 765

ARABIS, rock cress

Arabis canadensis L., sicklepod, p. 757
*A. **glabra** (L.) Bernh., tower mustard (Mohlenbrock, 1979)
A. **hirsuta** (L.) Scop., hairy rock cress, p. 754
var. adpressipilis (M. Hopk.) Rollins
var. pycnocarpa (M. Hopk.) Rollins
A. **laevigata** (Muhlenb. ex Willd.) Poiret, smooth rock cress, p. 754
var. laevigata

Arabis lyrata L., sand cress, p. 752
f. lyrata
f. parvisiliqua M. Hopk.
A. missouriensis E. Greene, rock cress, Missouri rock cress, p. 756
var. deamii (M. Hopk.) M. Hopk.
var. missouriensis
A. shortii (Fern.) Gleason, p. 756
var. phalacrocarpa (M. Hopk.) Steyerm.
var. shortii

ARMORACIA

Armoracia lacustris (A. Gray) Al-Shehbaz & V. Bates, lake cress [**S, M:** *A. aquatica* (Eaton) Wieg.] (Al-Shehbaz and Bates, 1987), p. 747
♦**A. rusticana** (Lam.) P. Gaertner, Meyer & Scherb., horseradish, p. 747

AUBRIETA

*♦**Aubrieta deltoidea** (L.) DC. (Dunn, 1982)

BARBAREA, winter cress

♦**Barbarea vulgaris** R. Br., yellow rocket, common winter cress, p. 761
var. arcuata (Opiz ex J. S. Presl & C. Presl) Fries
var. vulgaris

BERTEROA

♦**Berteroa incana** (L.) DC., hoary alyssum, p. 743

BRASSICA, mustard
(see also SINAPIS)

♦**Brassica juncea** (L.) Czernj., leaf mustard, Chinese mustard, Indian mustard, p. 734
var. crispifolia L. Bailey, curled mustard
var. juncea
♦**B. napus** L., rape, p. 736
var. napobrassica (L.) Peterm., rutabaga
***var. napus** (Mühlenbach, 1983)
♦**B. nigra** (L.) Koch, black mustard, p. 734
*♦**B. oleracea** L. (Mühlenbach, 1983)
♦**B. rapa** L., field mustard, turnip, bird's rape, p. 734
var. campestris (L.) Koch [**S:** *B. rapa*; **G:** *B. campestris* L.](Al-Shehbaz, 1985)
var. rapa

CAMELINA, false flax

♦**Camelina microcarpa** Andrz. ex DC., littlepod false flax, flaxweed, gold-of-pleasure, Dutch flax, p. 766
♦**C. sativa** (L.) Crantz, common false flax, false flax, p. 766

CAPSELLA, shepherd's purse

♦**Capsella bursa-pastoris** (L.) Medikus, p. 742

CARDAMINE, bitter cress
[S: incl. DENTARIA] (Al-Shehbaz, 1988a)

Cardamine bulbosa (Schreber ex Muhlenb.) Britton, Sterns & Pogg., springcress [**S:** incl. f. *fontinalis* E. J. Palmer & Steyerm.] (Al-Shehbaz, 1988b) (note that Al-Shehbaz (1988b) suggested that the basionym *Arabis bulbosa* Schreber ex Muhlenb. is a *nomen nudum*, but Merrill and Hu (1949), who studied Muhlenberg's publications, considered this name to have been validly published), p. 748

Cardamine concatenata (Michaux) O. Schwarz, toothwort [**S, M:** *Dentaria laciniata* Muhlenb. ex Willd.] (Al-Shehbaz, 1988a), p. 751

***♦C. diphylla** (Michaux) Alph. Wood, crinkleroot [*Dentaria diphylla* Michaux] (Harriman, 1965; Al-Shehbaz, 1988b)

C. douglassii (Torrey) Britton, purple cress, northern bitter cress, p. 750

♦C. hirsuta L., hoary bitter cress, p. 750

C. parviflora L., small-flowered bitter cress, p. 751

var. arenicola (Britton) O. Schulz

C. pensylvanica Muhlenb. ex Willd., bitter cress, Pennsylvania bittercress, p. 750

CARDARIA

♦Cardaria draba (L.) Desv., hoary cress, white top, p. 740

***ssp. chalepensis** (L.) O. Schulz, lens-podded hoary cress [**G:** *C. chalepensis* (L.) Hand.-Mazz.] (Al-Shehbaz, 1986) (note that this taxon was first reported for Missouri in **G:**)

ssp. draba, heart-podded hoary cress

♦C. pubescens (C. Meyer) Jarmol., globe-podded hoary cress, hoary cress, white top [**S:** incl. var. *elongata* Rollins] (Mulligan and Frankton, 1962), p. 740

CHORISPORA

♦Chorispora tenella (Pallas) DC., blue mustard, p. 761

CONRINGIA

♦Conringia orientalis (L.) Dumort., hare's-ear mustard, p. 737

CORONOPUS

♦Coronopus didymus (L.) Smith, wart cress, swine cress, p. 740

DENTARIA (see CARDAMINE)

S: Steyermark **G:** Great Plains Flora **M:** Mohlenbrock

DESCURAINIA

Descurainia pinnata (Walter) Britton, tansy mustard, p. 766
ssp. brachycarpa (Richardson) Detl. [**S:** *D. pinnata* var. *brachycarpa* (Richardson) Fern.] (Detling, 1939; Al-Shehbaz, 1988c)
ssp. pinnata
♦**D. sophia** (L.) Webb ex Prantl, flixweed, tansy mustard, p. 768

DRABA, whitlow wort, whitlow grass

Draba aprica Beadle, p. 746
D. brachycarpa Nutt. ex Torrey & A. Gray, whitlow grass, shortpod draba, p. 744
D. cuneifolia Nutt. ex Torrey & A. Gray, whitlow grass, wedgeleaf draba, p. 746
var. cuneifolia
D. reptans (Lam.) Fern., white whitlow wort [**S:** incl. var. *micrantha* (Nutt.) Fern.; **M:** incl. var. *stellifera* (O. Schulz) C. Hitchc.] (Al-Shehbaz, 1987), p. 746
♦**D. verna** L., vernal whitlow grass [**M:** *Erophila verna* (L.) Chev.] (Al-Shehbaz, 1987), p. 744
var. boerhaavii H. v. Hall [**M:** *Erophila verna* ssp. *praecox* (Steven) Walters] (Al-Shehbaz, 1987) (note that the infraspecific taxonomy of this species requires further study)
var. verna

ERUCA

♦**Eruca vesicaria** (L.) Cav., garden rocket, p. 736
ssp. sativa (Miller) Thell. [**S, G:** *E. sativa* Miller; **M:** *E. vesicaria*] (Maire, 1965; Al-Shehbaz, 1985)

ERUCASTRUM

♦**Erucastrum gallicum** (Willd.) O. Schulz, dog mustard, rocket weed, p. 736

S: Steyermark **G:** Great Plains Flora **M:** Mohlenbrock

ERYSIMUM, wallflower

Erysimum capitatum (Douglas ex Hook.) E. Greene, western wallflower, p. 762
ssp. capitatum
♦**E. cheiranthoides** L., wormseed mustard, wormseed wallflower, p. 762
ssp. cheiranthoides
♦**E. inconspicuum** (S. Watson) MacMillan, smallflower wallflower, p. 764
♦**E. repandum** L., bushy wallflower, treacle mustard, p. 764

HESPERIS

♦**Hesperis matronalis** L., dame's rocket, p. 762

IODANTHUS

Iodanthus pinnatifidus (Michaux) Steudel, purple rocket, violet rocket, p. 761

LEAVENWORTHIA

Leavenworthia uniflora (Michaux) Britton, p. 751

LEPIDIUM, pepper grass

♦**Lepidium campestre** (L.) R. Br., field cress, cow cress, field pepper grass, p. 737
L. densiflorum Schrader, pepper grass, green-flowered pepper grass, p. 738
var. densiflorum
*♦**L. latifolium** L., perennial pepper grass, broad-leaved pepper grass (Henderson, 1980)
♦**L. perfoliatum** L., shield cress, perfoliate pepper grass, p. 738
L. virginicum L., poor man's pepper grass, pepper grass, Virginia pepper grass, p. 738
var. virginicum

LESQUERELLA, bladderpod

Lesquerella filiformis Rollins, Missouri bladderpod, p. 747
♦**L. gracilis** (Hook.) S. Watson, spreading bladderpod, p. 747
ssp. gracilis
*ssp. **nuttallii** (Torrey & A. Gray) Rollins & E. Shaw (first reported in **G:**)

LOBULARIA

*♦**Lobularia maritima** (L.) Desv., sweet alyssum (Mühlenbach, 1979)

NASTURIUM (see RORIPPA)

NESLIA

♦**Neslia paniculata** (L.) Desv., ball mustard, p. 743

RAPHANUS, radish

♦**Raphanus raphanistrum** L., wild radish, jointed charlock, p. 737
♦**R. sativus** L., radish, garden radish

RAPISTRUM

*♦**Rapistrum rugosum** (L.) All., wild turnip, turnip weed [incl. var. *venosum* (Pers.) DC.] (Rebman, 1989; Al-Shehbaz, 1985)

RORIPPA, cress
[S, G, M: incl. NASTURTIUM]
(Al-Shehbaz, 1988b)

Rorippa islandica (var. *islandica*), see excluded taxa
♦**R. nasturtium-aquaticum** (L.) Hayek, water cress [**S, G, M:** *Nasturtium officinale* R. Br. incl. var. *siifolium* (Reichb.) Koch] (Green, 1962; Al-Shehbaz, 1988b), p. 757
R. palustris (L.) Besser, marsh yellow cress, bog yellow cress, yellow water cress [**S:** *R. islandica* (Oeder ex Murray) Borbás] (Stuckey, 1972), p. 760
ssp. glabra (O. Schulz) Stuckey
var. fernaldiana (Butters & Abbe) Stuckey [**S, M:** *R. islandica* var. *fernaldiana* Butters & Abbe] (Stuckey, 1972)
ssp. *hispida* (see excluded taxa)
R. sessiliflora (Nutt. ex Torrey & A. Gray) A. Hitchc., sessile-flowered cress, marsh cress, yellow cress, p. 760
R. sinuata (Nutt. ex Torrey & A. Gray) A. Hitchc., spreading yellow cress, p. 758
♦**R. sylvestris** (L.) Besser, creeping yellow cress, p. 758
***R. tenerrima** E. Greene (Stuckey, 1972)
R. teres (Michaux) Stuckey, see excluded taxa
***R. truncata** (Jepson) Stuckey (Stuckey, 1972)

SELENIA

Selenia aurea Nutt., p. 743

SIBARA

Sibara virginica (L.) Rollins, p. 752

SINAPIS, charlock
[S, G, M: BRASSICA] (Al-Shehbaz, 1985)

♦**Sinapis alba** L., white mustard, yellow mustard [**S, G, M:** *Brassica hirta* Moench] (Al-Shehbaz, 1985), p. 733
ssp. alba
♦**S. arvensis** L., wild mustard, charlock, crunchweed [**S, M:** *Brassica kaber* (DC.) Wheeler var. *pinnatifida* (Stokes) Wheeler; **G:** *Brassica kaber*] (Al-Shehbaz, 1985), p. 734

SISYMBRIUM

♦**Sisymbrium altissimum** L., tumble mustard, Jim Hill mustard, p. 765
♦**S. loeselii** L., tall hedge mustard, p. 765
♦**S. officinale** (L.) Scop., hedge mustard, p. 764
var. leiocarpum DC.
var. officinale

THLASPI, penny cress

♦**Thlaspi arvense** L., field penny cress, stinkweed, p. 742
♦**T. perfoliatum** L., penny cress, perfoliate penny cress, p. 742

BUDDLEJACEAE, butterfly bush family
[S, M: LOGANIACEAE]

BUDDLEJA

Buddleja davidii Franchet, see excluded taxa

POLYPREMUM

Polypremum procumbens L. (note that many authors continue to classify this genus in the Loganiaceae; it is only because we are following Cronquist's (1981) system in

(*Polypremum procumbens*, continued)
classifying genera into families that *Polypremum* is treated here in the Buddlejaceae; see Rogers (1986) for a discussion of this controversy), p. 1184

CABOMBACEAE, water shield family [S: NYMPHAEACEAE]

BRASENIA, water shield

Brasenia schreberi J. Gmelin, p. 669

CABOMBA, fanwort

Cabomba caroliniana A. Gray, fanwort, Carolina water shield, p. 669

CACTACEAE, cactus family

OPUNTIA, prickly pear

Opuntia humifusa (Raf.) Raf., eastern prickly pear [S: *O. compressa* (Salisb.) J. F. Macbr.] (Dress, 1975; Benson, 1976), p. 1084
var. humifusa
O. macrorhiza Engelm., plains prickly pear, p. 1086
var. macrorhiza
***O. polyacantha** Haw., plains prickly pear (Benson, 1982)
var. polyacantha

CAESALPINIACEAE, senna family
[S: LEGUMINOSAE, CAESALPINIOIDEAE]

CAESALPINIA
[S: HOFFMANNSEGGIA] (Isely, 1975)

♦**Caesalpinia jamesii** (Torrey & A. Gray) E. Fisher, rush pea [S: *Hoffmanseggia jamesii* Torrey & A. Gray] (Isely, 1975), p. 874

CASSIA (see CHAMAECRISTA, SENNA)

CERCIS, redbud

Cercis canadensis L., eastern redbud, p. 876
- **var. canadensis**
  - **f. alba** Rehder, white redbud
  - **f. canadensis**
  - **f. glabrifolia** Fern. [**M:** *C. canadensis*] (the validity of this form has not been studied critically)

CHAMAECRISTA, partridge pea
[S, G, M: CASSIA] (Irwin and Barneby, 1982)

Chamaecrista fasciculata (Michaux) E. Greene, showy partridge pea [**S:** *Cassia fasciculata* Michaux, incl. var. *depressa* (Pollard) J. F. Macbr., var. *fasciculata* f. *jensenii* E. J. Palmer & Steyerm., var. *robusta* (Pollard) J. F. Macbr.; **G:** *Cassia chamaecrista* L.; **M:** *Cassia fasciculata*] (Isely, 1975; Irwin and Barneby, 1982), p. 875

C. nictitans (L.) Moench, sensitive partridge pea, sensitive pea, wild sensitive plant [**S, G, M:** *Cassia nictitans* L.] (Irwin and Barneby, 1982), p. 876
- **var. nictitans**

GLEDITSIA, honey locust

Gleditisia aquatica Marshall, water locust, p. 873
G. triacanthos L., honey locust, p. 873
f. inermis C. Schneider, thornless honey locust
f. triacanthos

GYMNOCLADUS

Gymnocladus dioica (L.) K. Koch, Kentucky coffee tree, p. 872

HOFFMANNSEGGIA (see CAESALPINIA)

SENNA, senna
[S, G, M: CASSIA] (Irwin and Barneby, 1982)

Senna marilandica (L.) Link, wild senna [**S, G, M:** *Cassia marilandica* L.] (Irwin and Barneby, 1982), p. 874
S. obtusifolia (L.) H. Irwin & Barneby, sicklepod, coffee weed [**S:** *Cassia tora* L.; **G, M:** *Cassia obtusifolia* L.] (Irwin and Barneby, 1982), p. 875
♦**S. occidentalis** (L.) Link, coffee senna, coffee weed [**S, G, M:** *Cassia occidentalis* L.] (Irwin and Barneby, 1982), p. 874

CALLITRICHACEAE, water starwort family

CALLITRICHE, water starwort

Callitriche heterophylla Pursh, large water starwort, p. 998
var. heterophylla
C. terrestris Raf., terrestrial starwort, p. 996

CAMPANULACEAE, bellflower family

CAMPANULA, bellflower

Campanula americana L., tall bellflower, American bellflower, p. 1430
C. aparinoides Pursh, marsh bellflower, p. 1432
var. aparinoides
♦**C. rapunculoides** L., creeping bellflower, rover bellflower, false rampion, p. 1430
var. rapunculoides
C. rotundifolia L., harebell, bluebell, p. 1432

LOBELIA, lobelia

Lobelia appendiculata A. DC., see excluded taxa
L. cardinalis L., cardinal flower, p. 1440
ssp. cardinalis
var. cardinalis [S: incl. f. *alba* (Eaton) H. St. John, f. *rosea* H. St. John] (Bowden (1982) and several other authors have noted that the rare albino morph in this species is linked to the typical, red form by intermediates) (note that Bowden (1982) mentioned the existence in Missouri of hybrid swarms between this taxon and *L. cardinalis* ssp. *graminea* (Lam.) McVaugh var. *phyllostachya* (Engelm.) McVaugh; the latter variety is otherwise found only to the west and south of the state, but is poorly distinguishable from var. *cardinalis* in some parts of its range, as noted in G:)
L. inflata L., Indian tobacco, inflated lobelia, p. 1436
L. puberula Michaux, purple dewdrop, big blue lobelia, blue cardinal flower, p. 1437
var. mineolana F. Wimmer
L. siphilitica L., blue cardinal flower, great lobelia, blue lobelia, p. 1437
var. ludoviciana A. DC. [G, M: *L. siphilitica*] (Bowden, 1982)
var. siphilitica [S: incl. f. *albiflora* Britton, f. *purpurea* E. J. Palmer & Steyerm.] (Bowden, 1982)
L. x *speciosa* Sweet, see named hybrids

S: Steyermark G: Great Plains Flora M: Mohlenbrock

Lobelia spicata Lam., spiked lobelia, palespike lobelia, p. 1436
(the infraspecific taxonomy of this species requires further study and various authors disagree on the advisability of recognizing infraspecific taxa and at which level to place such entities that may exist; the nomenclature of S: is followed here, provisionally)
var. campanulata McVaugh [M: *L. spicata*]
var. hirtella A. Gray [G, M: *L. spicata*]
var. leptostachys (A. DC.) Mackenzie & Bush [G: *L. spicata*]
var. spicata

SPECULARIA (see TRIODANIS)

TRIODANIS, Venus' looking glass
[S: SPECULARIA] (McVaugh, 1945, 1948)

Triodanis biflora (Ruíz Lopez & Pavón) E. Greene [S: *Specularia biflora* (Ruíz Lopez & Pavón) Fischer & C. Meyer; M: *T. perfoliata* var. *biflora* (Ruíz Lopez & Pavón) Bradley] (McVaugh, 1945, 1948; Ward, 1978), p. 1433
T. holzingeri McVaugh [S: *Specularia holzingeri* (McVaugh) Fern.] (McVaugh, 1945, 1948), p. 1434
T. lamprosperma McVaugh [S: *Specularia lamprosperma* (McVaugh) Fern.] (McVaugh, 1945, 1948), p. 1434
T. leptocarpa (Nutt.) Nieuwl., slender-leaved Venus' looking glass [S: *Specularia leptocarpa* (Nutt.) A. Gray] (McVaugh, 1945, 1948), p. 1434
T. perfoliata (L.) Nieuwl. [S: *Specularia perfoliata* (L.) A. DC.]
f. perfoliata
f. alba Voigt [S: *Specularia perfoliata* f. *alba* (Voigt) Steyerm.] (McVaugh, 1948)

CANNABACEAE, hemp family
[S, M: MORACEAE]

CANNABIS, hemp, marijuana

♦**Cannabis sativa** L. (note that a complex infraspecific taxonomy exists for this species (Small and Cronquist, 1976); in this classification, Missouri materials would comprise the non-narcotic ssp. *sativa*, including var. *sativa* and var. *spontanea* Vav., and the narcotic ssp. *indica* (Lam.) E. Small & Cronq. (which does not persist outside of cultivation); numerous intermediates exist and many of the morphological characteristics of the species are subject to extensive environmental modification, with the result that for legal and floristic purposes *C. sativa* is probably best considered a polymorphic taxon without formal recognition of infraspecific taxa (Mitchell, 1988)), p. 564

HUMULUS, hops

♦**Humulus japonicus** Siebold & Zucc., Japanese hops, p. 566
H. lupulus L., common hops, p. 566
var. lupulus
***var. pubescens** E. Small (Small, 1978)

CAPPARACEAE, caper family

CLEOME

♦**Cleome hassleriana** Chodat, spider flower, pink queen [S: *C. houtteana* Schlecht.] (Iltis, 1967), p. 769
C. serrulata Pursh, Rocky Mountain bee plant, stinking clover, p. 768

POLANISIA

Polanisia dodecandra (L.) DC., clammy-weed, p. 769
ssp. dodecandra
ssp. trachysperma (Torrey & A. Gray) Iltis [**S:** *P. dodecandra* ssp. *dodecandra* var. *trachysperma* (Torrey & A. Gray) Iltis] (Iltis, 1966)

CAPRIFOLIACEAE, honeysuckle family

LONICERA, honeysuckle

Lonicera dioica L., limber honeysuckle, wild honeysuckle, red honeysuckle [**S, M:** incl. var. *glaucescens* (Rydb.) Butters] (Perino, 1978), p. 1406
L. flava Sims, yellow honeysuckle [**S:** incl. var. *flavescens* (Small) Gleason] (Perino, 1978), p. 1407
♦**L. japonica** Thunb., Japanese honeysuckle, p. 1406
var. japonica
*♦**L. maackii** (Rupr.) Maxim., bush honeysuckle, Amur honeysuckle (Mühlenbach, 1979)
♦**L. morrowii** A. Gray, bush honeysuckle, p. 1406
f. morrowii
L. reticulata Raf., grape honeysuckle [**S, G, M:** *L. prolifera* (Kirchner) Rehder] (Perino, 1978), p. 1408
♦**L. sempervirens** L., trumpet honeysuckle, coral honeysuckle, p. 1406
var. sempervirens
♦**L. xylosteum** L., fly honeysuckle, p. 1653

SAMBUCUS, elderberry

Sambucus canadensis L., common elderberry [**S:** incl. var. *submollis* Rehder] (Deam, 1940), p. 1418
var. canadensis
f. canadensis
f. rubra E. J. Palmer & Steyerm.
***var. laciniata** A. Gray (Castaner, 1983a)

S: Steyermark **G:** Great Plains Flora **M:** Mohlenbrock

Sambucus racemosa L., red-berried elderberry, stinking elderberry, p. 1419
ssp. pubens (Michaux) House [S: *S. pubens* Michaux] (Hultén, 1971) (note that although this combination is often credited to Hultén, it was first validly published by House (1913))

SYMPHORICARPOS, snowberry

***♦Symphoricarpos albus** (L.) S. F. Blake, white coralberry (Mühlenbach, 1983) (note that the single, very incomplete specimen at MO appears to represent var. *laevigatus* (Fern.) S. F. Blake, but this requires confirmation)
S. occidentalis Hook., wolfberry, western snowberry, p. 1410
S. orbiculatus Moench, coral berry, Indian currant, buckbrush, p. 1410
f. leucocarpus (D. Andrews) Rehder (Dierker, 1983)
f. orbiculatus

TRIOSTEUM, horse gentian

Triosteum angustifolium L., yellow-flowered horse gentian, p. 1411
var. angustifolium
f. angustifolium
***f. rubrum** F. Lane (Lane, 1953, 1954)
var. eamesii Wieg. (note that Lane (1954) treated this taxon at forma level, but this combination was apparently never published validly)
T. illinoense (Wieg.) Rydb. [S: *T. aurantiacum* Bickn. var. *illinoense* (Wieg.) E. J. Palmer & Steyerm.] (Deam, 1940; Lane, 1954), p. 1411
T. perfoliatum L., common horse gentian, wild coffee, tinker's weed, p. 1410

VIBURNUM, viburnum, black haw, arrow wood

Viburnum dentatum L., southern arrow wood, p. 1416
var. deamii (Rehder) Fern.
V. lentago L., nannyberry, sheepberry, wild raisin, p. 1414
V. molle Michaux, arrow wood, Kentucky viburnum, p. 1416
f. leiophyllum Rehder
f. molle
V. prunifolium L., black haw, p. 1414
V. rafinesquianum Schultes, downy arrow wood, Missouri viburnum, p. 1415
var. affine (Bush ex Schneider) House [G: *V. rafinesquianum*] (the validity of this taxon has not been examined critically; see Ferguson (1966) for discussion)
var. rafinesquianum
V. recognitum Fern., arrow wood, p. 1416
V. rufidulum Raf., southern black haw, wild raisin, p. 1415

CARYOPHYLLACEAE, pink family

AGROSTEMMA

♦**Agrostemma githago** L., corn cockle, p. 652

ARENARIA, sandwort
[M: incl. MINUARTIA, MOEHRINGIA]
(Maguire, 1951; Wofford, 1981)

Arenaria lateriflora L., grove sandwort [M: *Moehringia lateriflora* (L.) Fenzl] (Maguire, 1951) (note that the question of whether *Moehringia* should be segregated from *Arenaria* remains controversial; see McNeill (1962, 1980) for an opposing viewpoint), p. 643

Arenaria patula Michaux, sandwort [**M:** *Minuartia patula* (Michaux) Mattf.] (Maguire, 1951; Wofford, 1981) (note that the question of whether *Minuartia* should be segregated from *Arenaria* remains controversial; see McNeill (1962, 1980) for an opposing viewpoint), p. 644

var. patula [**S:** incl. f. *pitcheri* (Nutt.) Steyerm.] (Maguire, 1951)

var. robusta (Steyerm.) Maguire [**S:** incl. f. *media* Steyerm.] (Maguire, 1951) (note that **S:** attributed f. *media* to var. *patula*, rather than var. *robusta*; this complex requires further study)

♦**A. serpyllifolia** L., thyme-leaved sandwort, p. 642

ssp. serpyllifolia

ssp. leptoclados (Reichb.) Nyman [**S:** *A. serpyllifolia* var. *tenuior* Mert. & Koch; **G:** *A. serpyllifolia*] (Akeroyd, 1988)

A. stricta Michaux, rock sandwort [**M:** *Minuartia stricta* (Michaux) Hiern.] (Maguire, 1951; Wofford, 1981) (see note under *A. patula*; also note that if this taxon is transferred to *Minuartia*, the correct combination is *M. michauxii* (Fenzl) Farw.), p. 643

ssp. stricta

ssp. texana (Robinson) Maguire [**S:** *A. stricta*] (Maguire, 1951) (the infraspecific taxonomy of this species requires further study)

CERASTIUM, chickweed

Cerastium arvense L., mouse-ear chickweed, prairie chickweed [**S:** var. *villosum* (Muhlenb. ex Darl.) Hollick & Britton f. *oblongifolium* (Torrey) Pennell] (most North American authors have not recognized infraspecific taxa in this species; Ugborogho (1977), however, recognized 7 such taxa based upon cytological and morphological characters; although Missouri plants would fall nomenclaturally into his ssp. *velutinum* (Raf.) Ugbor. var. *villosum* (Mühlenb. ex Darl.) Ugbor., the plants themselves are more variable morphologically than can be accommodated in his key), p. 648

♦**Cerastium brachypetalum** Pers., p. 650
ssp. brachypetalum
ssp. tauricum (Sprengel) Murb. [**S:** *C. brachypetalum* f. *glandulosum* Koch] (Sell and Whitehead, 1964) (note that there is some question whether the scant Missouri materials are actually assignable to this taxon, a matter in need of further study)
C. brachypodum (Engelm. ex A. Gray) Robinson [**M:** *C. nutans* var. *brachypodum* Engelm. ex A. Gray] (Good, 1984), p. 648
♦**C. diffusum** Pers., mouse-eared chickweed [**S:** *C. tetrandrum* Curtis] (Sell and Whitehead, 1964), p. 649
ssp. diffusum
♦**C. fontanum** Baumg., common mouse-eared chickweed [**S:** *C. vulgatum*, incl. f. *glandulosum* (Boenn.) Druce; **G, M:** *C. vulgatum* L.] (Jalas, 1963; Good, 1984; Voss, 1985b) (note that great confusion exists as to the infraspecific taxonomy and nomenclature of this species; application of the various infraspecific epithets to Missouri plants has not been studied in detail; included under this name are plants treated by Mühlenbach (1979) as *C. holosteoides* Fries ssp. *triviale* (Link) Moeschl f. *glandulosum* (Boenn.) Moeschl), p. 647
♦**C. glomeratum** Thuill., clammy chickweed [**S:** *C. viscosum* L., incl. f. *apetalum* (Dumort.) Mert. & Koch] (Good, 1984) (note that the infraspecific taxonomy of this species requires further study), p. 649
C. nutans Raf., nodding chickweed, p. 648
♦**C. pumilum** Curtis, p. 652
ssp. pumilum
***f. medium** Moeschl (Mühlenbach, 1979) (note that the validity of this taxon requires further study)
f. pumilum
*♦**C. semidecandrum** L. (Mühlenbach, 1979), p. 650

DIANTHUS, pink, carnation
(see also PETROHAGIA)

♦**Dianthus armeria** L., Deptford pink, p. 661

♦**Dianthus barbatus** L., sweet William, p. 661
♦**D. deltoides** L., maiden pink, p. 661
*♦**D. plumarius** L., garden pink (Rabeler and Thieret, 1988)

GEOCARPON

Geocarpon minimum Mackenzie, geocarpon, p. 638

HOLOSTEUM

♦**Holosteum umbellatum** L., jagged chickweed, p. 652

LYCHNIS
(see also SILENE)

*♦**Lychnis coronaria** (L.) Desr., mullein pink (Dunn, 1982)

MYOSOTON [G: STELLARIA]
(Schlising and Iltis, 1961)

*♦**Myosoton aquaticum** (L.) Moench, giant chickweed [**G:** *Stellaria aquatica* (L.) Scop.] (Rabeler and Thieret, 1988) (note that there is disagreement among North American authors on the distinctness of *Myosoton* from *Stellaria*, although the genus is generally accepted in Europe; see Schlising and Iltis (1961) for a discussion of the differences between the two groups)

PARONYCHIA, nailwort, whitlow wort

Paronychia canadensis (L.) Alph. Wood, forked chickweed, p. 640
P. fastigiata (Raf.) Fern., forked chickweed, p. 640
var. fastigiata
var. paleacea Fern. [**G, M:** *P. fastigiata*] (Schlising and Iltis, 1961)

PETRORHAGIA
[S: DIANTHUS] (Rabeler, 1985)

♦**Petrorhagia prolifera** (L.) P. Ball & Heyw. [S: *Dianthus prolifer* L.] (Rabeler, 1985), p. 661

SAGINA, pearlwort

Sagina decumbens (Elliott) Torrey & A. Gray, trailing pearlwort, p. 642
ssp. decumbens
***S. procumbens** L. (Crow, 1978)

SAPONARIA, soapwort
(see also VACCARIA)

♦**Saponaria officinalis** L., bouncing bet, soapwort, p. 660

SCLERANTHUS, knawel

♦**Scleranthus annuus** L., knawel, annual knawel, p. 638

SILENE, catchfly
[S, M: incl. LYCHNIS] (McNeill, 1978)

Silene antirrhina L., sleepy catchfly, p. 654
f. antirrhina
f. apetala Farw. [G: *S. antirrhina*] (the infraspecific taxonomy of this species requires further study)
f. bicolor Farw. [G: *S. antirrhina*] (see above)
f. deaneana Fern. [G: *S. antirrhina*] (see above)
***♦S. armeria** L., sweet William catchfly (Mühlenbach, 1979)
S. caroliniana Walter, wild pink, p. 658
var. wherryi (Small) Fern.
♦**S. conoidea** L., p. 656
♦**S. csereii** Baumg., smooth catchfly, glaucous campion, p. 657
♦**S. dichotoma** Ehrh., forked catchfly, p. 657

S: Steyermark G: Great Plains Flora M: Mohlenbrock

♦**Silene dioica** (L.) Clairv., red campion [**S, M:** *Lychnis dioica* L.] (McNeill, 1978), p. 653
♦**S. gallica** L., p. 656
f. gallica
S. nivea (Nutt.) Otth, snowy campion, p. 657
♦**S. noctiflora** L., night-flowering catchfly, sticky cockle, p. 658
♦**S. pratensis** (Rafn) Godron & Gren., white campion, evening campion, white cockle [**S, M:** *Lychnis alba* Miller] (McNeill, 1978; McNeill and Prentice, 1981) (note that some workers have adopted the name *S. latifolia* Poiret for this taxon (*cf.*, Greuter and Burdet, 1982), but no discussion or confirmation has been published), p. 653
ssp. pratensis
S. regia Sims, royal catchfly, p. 660
S. stellata (L.) Aiton f., starry campion, p. 657
S. virginica L., fire pink, p. 658
♦**S. vulgaris** (Moench) Garcke, bladder campion, bladder catchfly [**S, M:** *S. cucubalus* Wibel] (Voss, 1985b), p. 657

SPERGULA, spurrey

♦**Spergula arvensis** L., corn spurrey, p. 642

STELLARIA, stitchwort (see also MYOSOTON)

♦**Stellaria graminea** L., common stitchwort, p. 646
S. longifolia Muhlenb. ex Willd., long-leaved stitchwort, p. 646
♦**S. media** (L.) Villars, common chickweed, p. 646
var. media
S. pubera Michaux, see excluded taxa

VACCARIA [S: SAPONARIA] (Meusel and Mühlberg, 1971)

♦**Vaccaria hispanica** (Miller) Rauschert, cow herb, cow soapwort, cow cockle [**S:** *Saponaria vaccaria* L.; **G, M:** *V. pyramidata* Medikus] (Rauschert, 1966; Meusel and Mühlberg, 1971), p. 660

CELASTRACEAE, staff tree family

CELASTRUS, bittersweet

Celastrus scandens L., American bittersweet, p. 1010

EUONYMUS, spindle tree

Euonymus americanus L., strawberry bush, brook euonymus, p. 1008
E. atropurpureus Jacq., wahoo, burning bush, p. 1008
*♦**E. fortunei** (Turcz.) Hand.-Mazz., wintercreeper (Mühlenbach, 1979)
E. obovatus Nutt., running strawberry bush, p. 1010

CERATOPHYLLACEAE, hornwort family

CERATOPHYLLUM, hornwort, coontail

Ceratophyllum demersum L., p. 662
C. echinatum A. Gray [M: *C. muricatum* Cham.] (Les, 1986, 1988), p. 664

CHENOPODIACEAE, goosefoot family

ATRIPLEX, saltbush, orach, orache

Atriplex argentea Nutt., see excluded taxa
*♦**A. heterosperma** Bunge, two-seeded orach (Mühlenbach, 1979)
♦**A. hortensis** L., garden orach, p. 614
♦**A. patula** L., spear-scale, fat hen saltbush, p. 615
♦**A. rosea** L., red scale, red orach, p. 615

♦**Atriplex triangularis** Willd., spear-scale [**S:** *A. patula* var. *hastata* (L.) A. Gray; **G:** *A. subspicata* (Nutt.) Rydb.; **M:** *A. patula*] (nomenclature and taxonomy of this species require further investigation; see Taschereau (1972), Welsh (1984), and Voss (1985b) for differing interpretations), p. 615

*♦**A. truncata** (Torrey) A. Gray, silver scale, silver scale saltbrush (Mühlenbach, 1979)

AXYRIS

♦**Axyris amaranthoides** L., Russian pigweed, p. 616

CHENOPODIUM, goosefoot, pigweed

♦**Chenopodium album** L., pigweed, lamb's quarters, p. 611

var. album

var. lanceolatum (Muhlenb. ex Willd.) Cosson & Germ.

♦**C. ambrosioides** L., Mexican tea, wormseed, p. 606

var. ambrosioides

var. anthelminticum (L.) A. Gray

C. atrovirens Rydb., see excluded taxa

C. berlandieri Moq., pitseed goosefoot [**M:** *C. missouriense* Aellen] (the synonymy in **M:** apparently reflects redetermination of Illinois specimens rather than the combination of these two species), p. 613

var. boscianum (Moq.) Wahl

var. zschackei (Murray) Murray

♦**C. botrys** L., Jerusalem oak, feather geranium, p. 606

C. bushianum Aellen, p. 614

♦**C. capitatum** (L.) Asch., strawberry blite, strawberry spinach, p. 607

♦**C. desiccatum** Nelson, p. 608

*♦**C. ficifolium** Smith (Mühlenbach, 1983)

♦**Chenopodium glaucum** L., oak-leaved goosefoot, p. 607
var. glaucum
var. salinum (Standley) J. Boivin [**G:** *C. glaucum*] (the status of this taxon remains unresolved; although combined with *C. glaucum* or treated as a variety of that species by most workers, this taxon was treated as a separate species, *C. glaucum* Standley, by Bassett and Crompton (1982))
♦**C. incanum** (S. Watson) A. A. Heller, p. 610
var. incanum
C. missouriense Aellen (note that Bassett and Crompton (1982) considered this taxon a variety of *C. album*; taxonomic relationships in the *C. album* complex require further study), p. 612
♦**C. murale** L., nettle-leaved goosefoot, p. 611
*♦**C. opulifolium** Schrader ex Koch & Ziz (Mühlenbach, 1979)
C. pallescens Standley, p. 610
♦**C. pratericola** Rydb. [**S, M:** *C. desiccatum* var. *leptophylloides* (Murray) Wahl] (Crawford, 1975), p. 608
♦**C. pumilio** R. Br., p. 606
C. rubrum L., coast blite, p. 608
var. rubrum
C. simplex (Torrey) Raf., maple-leaved goosefoot [**S, G, M:** *C. gigantospermum* Aellen] (Dorn, 1988), p. 610
C. standleyanum Aellen, p. 610
C. strictum Roth, p. 612
var. glaucophyllum (Aellen) Wahl
♦**C. urbicum** L., city goosefoot, p. 611
♦*C.* x *variabile* Aellen, see named hybrids
*♦**C. watsonii** Nelson (Mühlenbach, 1979)

CORISPERMUM, bugseed

Corispermum hyssopifolium L., p. 618
C. nitidum Kit. ex Schultes, p. 618
C. orientale Lam. [**S:** incl. var. *emarginatum* (Rydb.) J. F. Macbr.] (Maihle and Blackwell, 1978), p. 618

CYCLOLOMA

Cycloloma atriplicifolium (Sprengel) J. Coulter, winged pigweed, tumble ringwing, p. 602

KOCHIA

Kochia iranica (Hausskn. & Bornm.) Litv., see excluded taxa

♦**K. scoparia** (L.) Schrader, summer cypress, fire bush [**S:** incl. var. *culta* Farw., var. *pubescens* Fenzl] (Blackwell et al., 1978) (included here are plants listed as *K. sieversiana* (Pallas) C. Meyer by Mühlenbach (1983), a name equated by **S:** with *K. scoparia* var. *pubescens*), p. 602

MONOLEPIS

♦**Monolepis nuttalliana** (Roemer & Schultes) E. Greene, poverty weed, p. 616

SALSOLA, Russian thistle

*♦**Salsola collina** Pallas, Russian thistle, tumbleweed (Mühlenbach, 1979)

♦**S. iberica** Sennen & Pau, Russian thistle, tumbleweed, saltwort [**S:** *S. kali* L., incl. var. *tenuifolia* Tausch] (Beatley, 1973), p. 618

SUAEDA, seepweed

♦**Suaeda calceoliformis** (Hook.) Moq., sea blite [**S, G, M:** *S. depressa* (Pursh) S. Watson] (McNeill et al. 1977), p. 618

CISTACEAE, rockrose family

HELIANTHEMUM, rockrose

Helianthemum bicknellii Fern., rockrose, frostweed, p. 1066
***H. canadense** (L.) Michaux, rockrose, frostweed (Daoud and Wilbur, 1965)

LECHEA, pinweed

Lechea mucronata Raf. [**S, M:** *L. villosa* Elliott] (Wilbur, 1966), p. 1067
L. racemulosa Michaux, p. 1067
L. tenuifolia Michaux, p. 1067
var. tenuifolia

CLUSIACEAE (GUTTIFERAE), St. John's-wort family [S, M: HYPERICACEAE]

ASCYRUM, see HYPERICUM

HYPERICUM, St. John's-wort [S, G: incl. ASCYRUM] (Adams and Robson, 1961) (see also TRIADENUM)

Hypericum canadense L., see excluded taxa
H. densiflorum Pursh, see excluded taxa
H. drummondii (Grev. & Hook.) Torrey & A. Gray, nits and lice, p. 1061
H. gentianoides (L.) Britton, Sterns & Pogg., pineweed, orange grass, p. 1061
H. gymnanthum Engelm. & A. Gray, clasping-leaved St. John's-wort, small St. John's-wort, p. 1061

Hypericum hypericoides (L.) Crantz, St. Andrew's cross [**S, G:** *Ascyrum hypericoides* L.] (Adams and Robson, 1961), p. 1055

var. hypericoides

var. multicaule (Michaux ex Willd.) Fosb. [**S, G:** *Ascyrum hypericoides* var. *multicaule* (Michaux ex Willd.) Fern.; **M:** *H. stragulum* W. Adams & N. Robson] (the status of this taxon is controversial, it having been treated as a variety (Adams, 1957; Fosberg and Mazzeo, 1965; Cooperrider, 1989), subspecies (Robson, 1980), and at the species level as *H. stragulum* (Adams, 1962); it seems most reasonable to continue treating it as a variety at this time)

H. lobocarpum Gattinger ex J. Coulter [**S:** *H. densiflorum* Pursh var. *lobocarpum* (Gattinger ex J. Coulter) Svenson] (Adams, 1962), p. 1059

***H. majus** (A. Gray) Rusby, greater St. John's-wort (Yatskievych, 1990)

H. mutilum L., dwarf St. John's-wort, small-flowered St. John's-wort [**S:** incl. var. *parviflorum* (Willd.) Fern.] (D. H. Webb, 1980), p. 1060

♦**H. perforatum** L., common St. John's-wort, Klamath weed, p. 1058

H. prolificum L., shrubby St. John's-wort [**S:** *H. spathulatum* (Spach) Steudel] (Adams, 1959, 1962), p. 1059

H. pseudomaculatum Bush, spotted St. John's-wort [**S:** *H. punctatum* L. var. *pseudomaculatum* (Bush) Fern.; **G:** *H. punctatum*] (Culwell, 1970), p. 1059

f. flavidum Steyerm. [**S:** *H. punctatum* var. *pseudomaculatum* f. *flavidum* (Steyerm.) Steyerm.] (the validity of this taxon has not been studied critically)

H. punctatum Lam., spotted St. John's-wort [**S:** incl. f. *subpetiolatum* (Bickn. ex Small) Fern.] (the status of f. *subpetiolatum*, placed in synonymy without comment by Culwell (1970), requires further study), p. 1058

H. pyramidatum Dryander, great St. John's-wort, giant St. John's-wort (note that the relationship between this species and *H. ascyron* L., with which it is often combined, require further study), p. 1058

Hypericum sphaerocarpum Michaux, round-fruited St. John's-wort, p. 1060
var. sphaerocarpum
var. turgidum (Small) Svenson

TRIADENUM, marsh St. John's wort
[S: HYPERICUM] (Gleason, 1947; Voss, 1985b)

Triadenum tubulosum (Walter) Gleason [S: *Hypericum tubulosum* Walter] (Gleason, 1947; Voss, 1985b), p. 1062
T. walteri (J. Gmelin) Gleason [S: *Hypericum walteri* J. Gmelin] (Gleason, 1947; Voss, 1985b), p. 1062

COMPOSITAE (see ASTERACEAE)

CONVOLVULACEAE, morning glory family
(see also CUSCUTACEAE)

CALYSTEGIA, hedge bindweed
[S: CONVOLVULUS] (Lewis and Oliver, 1965)

***Calystegia macounii** (E. Greene) Brummitt (Lewis and Oliver, 1965)
♦**C. pellita** (Ledeb.) G. Don [S: *Convolvulus pellitus* Ledeb. f. *anestius* Fern.; M: *Calystegia pubescens* Lindley] (Lewis and Oliver, 1965) (see also G: for discussion; note that the combination for f. *anestius* has not been published in *Calystegia*), p. 1218
ssp. pellita
C. sepium (L.) R. Br., hedge bindweed, wild morning glory, Rutland beauty [S: *Convolvulus sepium* L.] (Lewis and Oliver, 1965; Brummitt, 1981) (application of the various infraspecific names to the bewildering array of morphological types has not been consistent in the past; we have tried to construct synonymy in the sense that these names have been applied to midwestern plants in the three floras treated; until Brummitt's

(*Calystegia sepium*, continued)
forthcoming monograph, with comprehensive synonymy, is published, the application of various older names to Missouri materials will remain ambiguous), p. 1218
ssp. americana (Sims) Brummitt [**S:** *Convolvulus sepium* var. *repens* (L.) A. Gray, var. *sepium* f. *malacophyllus* Fern.] (note that according to Brummitt (1981), the name *repens* actually refers to *Ipomoea imperati* (M. Vahl) Griseb. [cited as *I. stolonifera* (Cirillo) J. Gmelin] (La Valva and Sabato, 1983), which does not occur in Missouri)
ssp. angulata Brummitt [**S:** *Convolvulus sepium* var. *sepium*, incl. f. *coloratus* Lange] (Brummitt, 1981)
C. silvatica (Kit.) Griseb. [**S:** *Convolvulus sepium*] (Lewis and Oliver, 1965; Brummitt, 1981), p. 1218
ssp. fraterniflora (Mackenzie & Bush) Brummitt [**S:** *Convolvulus sepium* var. *fraterniflorus* Mackenzie & Bush] (Brummitt, 1981)
C. spithamaea (L.) Pursh, low bindweed, dwarf morning glory [**S:** *Convolvulus spithamaeus* L.] (Lewis and Oliver, 1965), p. 1217
ssp. spithamaea

CONVOLVULUS, bindweed (see also CALYSTEGIA)

♦**Convolvulus arvensis** L., field bindweed, small bindweed, p. 1220
f. arvensis
f. cordifolius Lasch

CUSCUTA (see CUSCUTACEAE)

EVOLVULUS, evolvulus

♦**Evolvulus alsinoides** L., p. 1212
E. nuttallianus Roemer & Schultes [**M:** *E. pilosus* Nutt.] (Perry, 1935), p. 1212

IPOMOEA, morning glory

*♦**Ipomoea amnicola** Morong (Shinners, 1965)
♦**I. cairica** (L.) Sweet, p. 1653
♦**I. coccinea** L., red morning glory, scarlet starglory, p. 1214
♦**I. hederacea** Jacq., blue morning glory, ivy-leaved morning glory, [S: incl. var. *integriuscula* A. Gray] (Elmore, 1986), p. 1214
I. lacunosa L., small white morning glory [S: incl. f. *purpurata* Fern.] (Abel and Austin (1981) interpreted plants assignable to f. *purpurata* as introgressive hybrids between *I. lacunosa* and *I. cordato-triloba* Dennst. [= *I. trichocarpa* Elliott]; these hybrids are common in the southeastern United States and Missouri plants may have been introduced from there), p. 1216
I. pandurata (L.) G. Meyer, wild potato vine, man-of-the-earth, bigroot morning glory, p. 1216
f. pandurata
f. leviuscula Fern.
♦**I. purpurea** (L.) Roth, common morning glory [incl. var. *diversifolia* (Lindley) O'Don.] (Mühlenbach, 1979; Austin, 1986), p. 1216
♦**I. quamoclit** L., cypress vine, p. 1214

JACQUEMONTIA

*♦**Jacquemontia tamnifolia** (L.) Griseb., tie vine, smallflower morning glory (Mühlenbach, 1979)

STYLISMA

***Stylisma pickeringii** (Torrey) A. Gray (Conrad, 1989)
var. pattersonii (Fern. & B. G. Schubert) Myint

CORNACEAE, dogwood family (see also NYSSACEAE)

CORNUS, dogwood

Cornus alternifolia L. f., alternate-leaved dogwood, green osier, pagoda dogwood, pigeon berry, p. 1154
C. amomum Miller, swamp dogwood, pale dogwood, p. 1152
ssp. obliqua (Raf.) J. Wilson [**S:** *C. obliqua* Raf.] (Wilson, 1965)
C. drummondii C. Meyer, rough-leaved dogwood, p. 1152
C. florida L., flowering dogwood, p. 1150
f. florida
f. rubra (Weston) E. J. Palmer & Steyerm., pink dogwood [**M:** *C. florida*] (the genetic basis for this color variant has not been investigated; it is retained here because of the form's horticultural importance)
C. foemina Miller, gray dogwood, stiff dogwood, p. 1152
ssp. foemina
ssp. racemosa (Lam.) J. Wilson [**S:** *C. racemosa* Lam.] (Wilson, 1965)

CORYLACEAE (see BETULACEAE)

CRASSULACEAE, stonecrop family

PENTHORUM, see SAXIFRAGACEAE

SEDUM, stonecrop, orpine

*♦**Sedum acre** L., mossy stonecrop (Clausen, 1975)
ssp. acre
S. nuttallianum Raf., Nuttall's sedum, p. 772
S. pulchellum Michaux, widow's cross, p. 772
♦**S. purpureum** (L.) Schultes, live-forever [**S:** *S. telephium* L. ssp. *purpureum* (L.) Schinz & R. Keller] (Clausen, 1975), p. 773

♦**Sedum sarmentosum** Bunge, yellow stonecrop, p. 772
S. telephium L. ssp. *fabaria* (Koch) Schinz & R. Keller, see excluded taxa
S. ternatum Michaux, three-leaved stonecrop, p. 772

CRUCIFERAE (see BRASSICACEAE)

CUCURBITACEAE, gourd family

CAYAPONIA, silva manso

Cayaponia grandifolia (Torrey & A. Gray) Small, p. 1427

CITRULLUS

♦**Citrullus lanatus** (Thunb.) Matsum. & Nakai, watermelon [**S:** *C. vulgaris* Schrader] (see Scholz (1979) for a summary of the classification followed here), p. 1426

CUCUMIS

♦**Cucumis melo** L., melon, muskmelon, p. 1427
var. melo
*♦**C. sativus** L., cucumber (Mühlenbach, 1979)

CUCURBITA

Cucurbita foetidissima Humb., Bonpl. & Kunth, buffalo gourd, Missouri gourd, wild pumpkin, p. 1426
♦**C. pepo** L., yellow-flowered gourd, pear gourd, p. 1426
var. ovifera (L.) Alef.

ECHINOCYSTIS

Echinocystis lobata (Michaux) Torrey & A. Gray, wild cucumber vine, balsam apple, p. 1428

LAGENARIA

♦**Lagenaria siceraria** (Molina) Standley, bottle gourd, p. 1426

MELOTHRIA

Melothria pendula L., creeping cucumber, p. 1427

SICYOS

Sicyos angulatus L., bur cucumber, p. 1428

CUSCUTACEAE, dodder family [S: CONVOLVULACEAE]

CUSCUTA, dodder, love vine

Cuscuta campestris Yuncker, p. 1223
C. cephalanthi Engelm., buttonbush dodder, p. 1224
C. compacta Juss., p. 1222
C. coryli Engelm., hazel dodder, p. 1224
C. cuspidata Engelm., cusp dodder, p. 1222
C. glomerata Choisy, p. 1222
C. gronovii Willd., p. 1223
C. indecora Choisy, large alfalfa dodder, p. 1223
var. neuropetala (Engelm.) Hitchc.
C. pentagona Engelm., field dodder, p. 1222
C. polygonorum Engelm., smartweed dodder, p. 1224

DIPSACACEAE, teasel family

DIPSACUS, teasel

♦**Dipsacus fullonum** L., common teasel, wild teasel [**S, M:** *D. sylvestris* Hudson] (Ferguson and Brizicky, 1965) (note that the white-flowered *D. sylvestris* f. *albidus* Steyerm. was reported growing in Missouri by Dunn (1982), but this epithet has not been transferred to *D. fullonum*), p. 1422

*♦**D. laciniatus** L., cut-leaved teasel (Henderson, 1980)

EBENACEAE, ebony family

DIOSPYROS, persimmon

Diospyros virginiana L., persimmon, possumwood, p. 1174

var. platycarpa Sarg. [**G, M:** *D. virginiana*] (Wood and Channell, 1960; Spongberg, 1977)

f. atra Sarg. [**M:** *D. virginiana*] (Spongberg, 1977)

f. platycarpa

var. pubescens (Pursh) Dippel [**G, M:** *D. virginiana*] (Wood and Channell, 1960; Spongberg, 1977)

f. pubescens

f. pumila (E. J. Palmer & Steyerm.) Steyerm.

var. virginiana

ELAEAGNACEAE, oleaster family

ELAEAGNUS, oleaster

♦**Elaeagnus angustifolia** L., Russian olive, oleaster, p. 1087

♦**E. multiflora** Thunb., long-stalked oleaster, p. 1087

*♦**E. umbellata** Thunb., autumn olive (Yatskievych and Figg, 1989)

ELATINACEAE, waterwort family

BERGIA

Bergia texana (Hook.) Seub., bergia, p. 1064

ELATINE, waterwort

Elatine triandra Schkuhr [**S:** *E. triandra* var. *americana* (Pursh) Fassett] (Duncan, 1964) (note that the relationships among *E. triandra*, *E. americana* Pursh, and *E. brachycarpa* (included in **M:** and placed in synonymy by Duncan (1964)) require further study; see Tucker (1986) for a different interpretation), p. 1064

ERICACEAE, heath family

GAYLUSSACIA, huckleberry

Gaylussacia baccata (Wangenh.) K. Koch, black huckleberry, p. 1159

LYONIA

Lyonia mariana (L.) D. Don, stagger bush, p. 1159

RHODODENDRON, rhododendron, azalea

Rhododendron prinophyllum (Small) Millais, wild honeysuckle, azalea, mountain azalea, election pink [**S:** *R. roseum* (Lois.) Rehder, incl. f. *albidum* Steyerm.] (Shinners, 1962b; Wilbur, 1976; Kron, 1989) (note that f. *albidum* has not been transferred to *R. prinophyllum*), p. 1158

VACCINIUM, blueberry

Vaccinium arboreum Marshall, farkleberry, sparkleberry [S, M: incl. var. *glaucescens* (E. Greene) Sarg.] (see Wood, (1961) for discussion; infraspecific variation in this species requires further study), p. 1160

V. pallidum Aiton, lowbush blueberry, hillside blueberry [S: *V. vacillans* Torrey, incl. var. *crinitum* Fern., var. *missouriense* Ashe] (Vander Kloet, 1978), p. 1163

V. stamineum L., deerberry, highbush huckleberry, southern gooseberry [S: incl. var. *interius* (Ashe) E. J. Palmer & Steyerm., var. *melanocarpum* C. Mohr, var. *neglectum* (Small) Deam] (Uttal, 1986), p. 1162

EUPHORBIACEAE, spurge family

ACALYPHA, three-seeded mercury

***Acalypha deamii** (Weath.) H. E. Ahles, large-seeded mercury (Miller, 1964)

A. gracilens A. Gray, slender three-seeded mercury, p. 980

ssp. gracilens [S: incl. var. *fraseri* (Muell. Arg.) Weath., var. *gracilens*] (the nomenclatural and taxonomic placement of var. *fraseri* are unclear, but Missouri plants apparently combine features of ssp. *gracilens* and ssp. *monococca*; plants from the southeastern United States matching this description were treated by Miller (1964, 1969) as *A. gracilens* var. *delzii* L. Miller, but Webster (1967) suggested that they might represent elements transitional between the existing subspecies; further studies are needed)

ssp. monococca (Engelm. ex A. Gray) Webster [S: var. *monococca* Engelm. ex A. Gray; G: *A. monococca* (Engelm. ex A. Gray) L. Miller & Ghandi] (Webster, 1967)

A. ostryifolia Riddell, p. 979

A. rhomboidea Raf., rhombic copperleaf, three-seeded mercury, p. 979

Acalypha virginica L. (note that Cooperrider (1984) has pointed out problems in distinguishing *A. deamii*, *A. rhomboidea*, and *A. virginica*, treating these taxa as varieties of the last-named species; further studies are needed), p. 979

ANDRACHNE

Andrachne phyllanthoides (Nutt.) J. Coulter, buck brush, p. 974

CHAMAESYCE
[S, G: EUPHORBIA] (Webster, 1967)

Chamaesyce geyeri (Engelm.) Small, Geyer's spurge [S, G: *Euphorbia geyeri* Engelm.] (Webster, 1967; Richardson et al., 1987), p. 990

C. glyptosperma (Engelm.) Small, sand mat, rib-seeded sand mat [S, G: *Euphorbia glyptosperma* Engelm.] (Webster, 1967; Richardson et al., 1987), p. 996

C. humistrata (Engelm.) Small S, G: *Euphorbia humistrata* Engelm.] (Webster, 1967), p. 994

C. maculata (L.) Small, milk purslane, prostrate spurge [S: *Euphorbia supina* Raf.; M: *Chamaesyce supina* (Raf.) Mold.] (Burch, 1966; Richardson et al., 1987) (note that the epithet *supina* was previously misapplied in most floras to prostrate plants correctly referred to as *C. maculata*; plants with ascending stems previously referred to by the epithet *maculata* are more correctly known as *C. nutans*), p. 994

C. missurica (Raf.) Shinn., prairie spurge, Missouri spurge [S, G: *Euphorbia missurica* Raf.] (Webster, 1967), p. 992

C. nutans (Lag.) Small, nodding spurge [S: *Euphorbia maculata* L.; M: *C. maculata* (L.) Small] (Burch, 1966; Richardson et al., 1987) (see discussion under *C. maculata*), p. 992

♦**C. prostrata** (Aiton) Small, groundfig spurge, milk spurge [S, G: *Euphorbia prostrata* Aiton] (Webster, 1967), p. 994

C. serpens (Humb., Bonpl. & Kunth) Small, round-leaved spurge [S, G: *Euphorbia serpens* Humb., Bonpl. & Kunth] (Webster, 1967), p. 992

♦**Chamaesyce serpyllifolia** (Pers.) Small, thyme-leaved spurge [**S, G:** *Euphorbia serpyllifolia* Pers.] (Webster, 1967; Richardson et al., 1987), p. 994
♦**C. stictospora** (Engelm.) Small, mat spurge [**S, G:** *Euphorbia stictospora* Engelm.] (Webster, 1967), p. 994

CROTON, croton

Croton capitatus Michaux, woolly croton, hogwort, p. 977
var. capitatus
var. lindheimeri (Engelm. & A. Gray) Muell. Arg.
C. glandulosus L., sand croton, tropic croton, p. 976
var. septentrionalis Muell. Arg.
*♦**C. lindheimerianus** Scheele (Mühlenbach, 1979)
C. monanthogynus Michaux, one-seeded croton, prairie tea, p. 977
♦**C. texensis** (Klotzsch) Muell. Arg., skunk weed, Texas croton, p. 977

CROTONOPSIS, rushfoil

Crotonopsis elliptica Willd., p. 978
C. linearis Michaux, p. 978

EUPHORBIA, spurge
[**M:** incl. POINSETTIA] (Webster, 1967)
(see also CHAMAESYCE)

Euphorbia commutata Engelm., wood spurge, p. 989
E. corollata L., flowering spurge [**S:** incl. var. *mollis* Millsp., var. *paniculata* (Elliott) Boiss.; **M:** incl. var. *mollis* Millsp.] (the varieties *mollis* and *paniculata* were listed by Huft (1979) as synonyms of *E. pubentissima* Michaux, but all Missouri collections earlier attributed to these varieties were redetermined by Huft as *E. corollata* and he does not show *E. pubentissima* as occurring in the state; most other authors, including Richardson et al. (1987) and Smith (1988) have not accepted any of these entities as separable from the morphologically variable *E. corollata*, a view tentatively accepted here), p. 989

*Euphorbia cyathophora Murray, painted leaf, fire-on-the-mountain [M: *Poinsettia cyathophora* (Murray) Klotzsch & Garcke, incl. var. *graminifolia* (Michaux) Mohl.] (Dressler, 1961; Webster, 1967; Richardson et al., 1987), p. 986

♦E. cyparissias L., cypress spurge, graveyard spurge, p. 988

E. dentata Michaux, toothed spurge [S: incl. f. *cuphosperma* (Engelm.) Fern.; M: *Poinsettia dentata* (Michaux) Klotzsch & Garcke, incl. var. *cuphosperma* (Engelm.) Mohl.] (Dressler, 1961; Webster, 1967; Richardson et al., 1987), p. 986

♦E. esula L., leafy spurge, wolf's milk, p. 989

E. heterophylla L., see excluded taxa

E. marginata Pursh, snow-on-the-mountain, p. 989

E. obtusata Pursh, blunt-leaved spurge, p. 988

♦E. platyphylla L., p. 988

E. spathulata Lam., p. 988

PHYLLANTHUS, leaf-flower

Phyllanthus caroliniensis Walter, p. 974
ssp. caroliniensis

P. polygonoides Nutt. ex Sprengel, buck brush, p. 974

RICINUS

♦Ricinus communis L., castor oil plant, castor bean, p. 982

TRAGIA, noseburn

*Tragia betonicifolia Nutt. (Miller and Webster, 1967)

T. cordata Michaux, p. 982

*T. ramosa Torrey (Miller and Webster, 1967)

T. urticifolia Michaux, see excluded taxa

FABACEAE, bean family
[S: LEGUMINOSAE, PAPILIONOIDEAE]

ACACIA (see MIMOSACEAE)

AESCHYNOMENE, jointvetch

*♦**Aeschynomene indica** L., Indian jointvetch (Dunn and Knauer, 1975)

ALBIZZIA (see MIMOSACEAE)

AMORPHA

Amorpha canescens Pursh, lead plant [**S:** incl. *A. brachycarpa* E. J. Palmer, *A. canescens* f. *glabrata* (A. Gray) Fassett] (Wilbur, 1964), p. 901

A. fruticosa L., false indigo [**S:** incl. var. *angustifolia* Pursh, var. *croceolanata* (Watson) Mouill., var. *oblongifolia* E. J. Palmer, var. *tennesseensis* (Shuttlew. ex Kunze) E. J. Palmer; **M:** incl. var. *angustifolia*, var. *croceolanata*] (Wilbur, 1975), p. 902

A. x *notha* E. J. Palmer, see named hybrids

AMPHICARPAEA

Amphicarpaea bracteata (L.) Fern., hog peanut [**S, M:** incl. var. *comosa* (L.) Fern.] (Turner and Fearing, 1964), p. 953

ANTHYLLIS

Anthyllis vulneraria L., see excluded taxa

APIOS, groundnut

Apios americana Medikus, groundnut, American potatobean [**S:** incl. var. *americana* f. *pilosa* Steyerm., var. *turrigera* Fern.] (Wilbur, 1963; McGregor, 1986a), p. 947

ARACHIS, peanut

♦**Arachis hypogaea** L., peanut, p. 937

ASTRAGALUS, milk vetch

Astragalus canadensis L., rattle weed, p. 908
var. canadensis
A. crassicarpus Nutt., ground plum [**S:** *A. caryocarpus* Ker Gawler] (Barneby, 1964; Isely, 1984), p. 908
var. crassicarpus
var. trichocalyx (Nutt.) Barneby [**S:** *A. mexicanus* A. DC. var. *trichocalyx* (Nutt.) Fern.] (Barneby, 1964)
A. distortus Torrey & A. Gray, Ozark milk vetch, bent milk vetch, p. 908
var. distortus
A. lotiflorus Hook., low milk vetch, p. 908

BAPTISIA, false indigo

Baptisia alba (L.) Vent., white wild indigo, p. 881
var. macrophylla (Larisey) Isely [**S:** *B. leucantha* Torrey & A. Gray; **G, M:** *B. lactea* (Raf.) Thieret] (Isely, 1986b)
B. australis (L.) R. Br., blue false indigo, p. 880
var. minor (Lehm.) Fern.
B. x *bicolor* Greenman & Larisey, see named hybrids
B. bracteata Muhlenb. ex Elliott, cream white indigo, long-bracted wild indigo, plains wild indigo, p. 880
var. glabrescens (Larisey) Isely [**S, M:** *B. leucophaea* Nutt., incl. var. *glabrescens* Larisey] (Isely, 1981) (note that Voss (1985a) suggested that the correct name for this taxon should be "var. *leucophaea*," but this combination has not been published)
♦**B. sphaerocarpa** Nutt., yellow wild indigo, round-fruited yellow wild indigo, p. 881

CAESALPINIA (see CAESALPINIACEAE)

CANAVALIA

♦**Canavalia ensiformis** (L.) DC., jack bean, wonder bean, p. 953

CASSIA (see CAESALPINIACEAE)

CERCIS (see CAESALPINIACEAE)

CHAMAECRISTA (see CAESALPINIACEAE)

CLADRASTIS, yellowwood

Cladrastis kentukea (Dum.-Cours.) Rudd, yellowwood [S: *C. lutea* (Michaux f.) K. Koch] (Rudd, 1971) (note that the situation concerning the correct name for the yellowwood remains controversial; Isely (1981) has listed some of the problems), p. 881

CLITORIA

Clitoria mariana L., butterfly pea, p. 947

CORONILLA (see SECURIGERA)

CROTALARIA, rattlepod, rattlebox

Crotalaria sagittalis L., rattlebox, p. 882
♦**C. spectabilis** Roth, showy rattlebox, p. 882

DALEA [S: incl. PETALOSTEMON] (Barneby, 1977)

Dalea candida Michaux ex Willd., white prairie clover [S: *Petalostemon candidum* (Michaux ex Willd.) Michaux] (Barneby, 1977), p. 900
var. candida

Dalea compacta Sprengel var. *pubescens* (A. Gray) Barneby [S: *Petalostemon purpureum* f. *pubescens* (A. Gray) Fassett], see excluded taxa

D. enneandra Nutt., nine-anthered prairie clover, p. 898

D. leporina (Aiton) Bullock, foxtail dalea, hare's foot dalea [S: *D. alopecuroides* Willd.] (Isely, 1962; Barneby, 1977), p. 898

D. multiflora (Nutt.) Shinn., round-headed prairie clover [S: *Petalostemon multiflorum* Nutt.] (Barneby, 1977), p. 900

D. purpurea Vent., purple prairie clover [S: *Petalostemon purpureum* (Vent.) Rydb., incl. f. *pubescens* (A. Gray) Fassett] (Barneby, 1977) (note that the epithet *pubescens* belongs to a variety of *Dalea compacta* Sprengel, which does not occur in Missouri), p. 900

var. purpurea

DESMANTHUS (see MIMOSACEAE)

DESMODIUM,
tick clover, tick trefoil, beggar's lice

Desmodium canadense (L.) DC., giant tick clover, showy tick trefoil, Canada tick clover, p. 920

D. canescens (L.) DC., hoary tick clover, p. 916

f. canescens

D. ciliare (Muhlenb. ex Willd.) DC., slender tick clover, p. 918

var. ciliare

D. cuspidatum (Muhlenb. ex Willd.) Loudon, longleaf tick clover, p. 920

var. cuspidatum

var. longifolium (Torrey & A. Gray) B. G. Schubert

D. glabellum (Michaux) DC., tall tick clover [S, G: *D. paniculatum* var. *dillenii* (Darl.) Isely] (Isely, 1983), p. 924

D. glutinosum (Muhlenb. ex Willd.) Alph. Wood, large-flowered tick clover, sticky tick clover, p. 914

f. glutinosum

D. humifusum (Muhlenb. ex Willd.) Beck, see excluded taxa

D. illinoense A. Gray, Illinois tick clover, p. 916

Desmodium laevigatum (Nutt.) DC., smooth tick clover, p. 925
D. marilandicum (L.) DC., Maryland tick clover, p. 918
D. nudiflorum (L.) DC., p. 914
f. foliolatum (Farw.) Fassett
f. nudiflorum
D. nuttallii (Schindler) B. G. Schubert, p. 922
D. obtusum (Muhlenb. ex Willd.) DC. [**S:** *D. rigidum* (Elliott) DC.] (Voss, 1985b) (while *D. obtusum* has become widely accepted as the correct name for what used to be called *D. rigidum*, we have been unable to find any literature that discusses the typification problems in this taxon), p. 918
D. ochroleucum M. Curtis, p. 916
D. paniculatum (L.) DC., p. 922
D. pauciflorum (Nutt.) DC., small-flowered tick clover, few-flowered tick clover, p. 914
D. perplexum B. G. Schubert [**S, G:** *D. paniculatum* var. *dillenii* (Darl.) Isely; **M:** *D. glabellum*] (Isely, 1983), p. 924
D. rotundifolium DC., dollarleaf, low tick trefoil, p. 916
D. sessilifolium (Torrey) Torrey & A. Gray, p. 918
***D. strictum** (Pursh) DC. (Dunn, 1982)
D. viridiflorum (L.) DC., p. 922

GALACTIA, milkpea

Galactia regularis (L.) Britton, Sterns & Pogg., downy milkpea [**S:** *G. volubilis* (L.) Britton var. *mississippiensis* Vail] (Duncan, 1979) (note that *G. volubilis* is a valid species whose range does not extend to Missouri), p. 954

GLEDITSIA (see CAESALPINIACEAE)

GLYCINE, soybean

♦**Glycine max** (L.) Merr., soybean, p. 952

GLYCYRRHIZA, licorice

Glycyrrhiza lepidota (Nutt.) Pursh, wild licorice, p. 911
var. lepidota

GYMNOCLADUS (see CAESALPINIACEAE)

HOFFMANNSEGGIA (see CAESALPINIACEAE)

KUMMEROWIA [S, G: LESPEDEZA] (Ohashi, 1971; Ohashi et al., 1981)

♦**Kummerowia stipulacea** (Maxim.) Makino Korean clover, Korean lespedeza [S, G: *Lespedeza stipulacea* Maxim.] (Ohashi, 1971; Ohashi et al., 1981), p. 936
♦**K. striata** (Thunb.) Schindler, Japanese lespedeza, common lespedeza [S, G: *Lespedeza striata* (Thunb.) Hook. & Arn.] (Ohashi, 1971; Ohashi et al., 1981), p. 936

LATHYRUS, vetchling, wild pea

♦**Lathyrus hirsutus** L.. Caley pea, singletary pea, p. 946
♦**L. latifolius** L., everlasting pea, perennial pea, p. 946
L. palustris L., vetchling, marsh pea, p. 944
var. myrtifolius (Muhlenb. ex Willd.) A. Gray
var. palustris
L. pusillus Elliott, singletary vetchling, p. 946
L. venosus Muhlenb. ex Willd., bushy vetchling, p. 944
var. intonsus Butters & H. St. John

LESPEDEZA, bush clover (see also KUMMEROWIA)

*♦**Lespedeza bicolor** Turcz., bicolor lespedeza (Mühlenbach, 1979)
L. x *brittonii* Bickn., see named hybrids

Lespedeza capitata Michaux, round-headed bush clover, roundhead lespedeza [S: incl. var. *stenophylla* Bissell & Fern. f. *stenophylla*, var. *stenophylla* f. *argentea* Fern., var. *vulgaris* Torrey & A. Gray] (Clewell, 1966), p. 932
♦**L. cuneata** (Dum.-Cours.) Don, sericea lespedeza, p. 934
L. hirta (L.) Hornem., hairy bush clover, hairy lespedeza, p. 934
var. hirta
L. intermedia (S. Watson) Britton, p. 929
L. x *manniana* Mackenzie & Bush, see named hybrids
L. x *neglecta* (Britton) Mackenzie & Bush, see named hybrids
L. x *nuttallii* Darl., see named hybrids
L. procumbens Michaux, trailing bush clover, trailing lespedeza, p. 928
L. repens (L.) Barton, creeping bush clover, creeping lespedeza, p. 926
L. x *simulata* Mackenzie & Bush, p. 930
L. stuevei Nutt., tall bush clover, tall lespedeza, p. 930
♦**L. thunbergii** (DC.) Nakai, tall bush clover, tall lespedeza, p. 929
L. violacea (L.) Pers., prairie bush clover, prairie lespedeza, p. 928
L. virginica (L.) Britton, slender bush clover, slender lespedeza, p. 929

LOTUS, trefoil
[M: incl. *Hosackia*] (Isely, 1981)

♦**Lotus corniculatus** L., bird's foot trefoil, p. 895
L. purshianus (Benth.) Clements & E. Clements, prairie trefoil [M: *Hosackia americana* (Nutt.) Piper] (Isely, 1981), p. 895
var. purshianus

MEDICAGO, medick

♦**Medicago arabica** (L.) Hudson, spotted medick, spotted bur clover, p. 891
♦**M. lupulina** L., black medick [S: incl. var. *glandulosa* Neilr.] (Shinners, 1956a), p. 891

*♦**Medicago minima** (L.) Bartal., small bur clover, prickly medick (Yatskievych, 1990)
♦**M. polymorpha** L., California bur clover, bur clover, p. 892
var. vulgaris (Benth.) Shinn.
♦**M. sativa** L., alfalfa, p. 891
ssp. sativa

MELILOTUS, sweet clover

♦**Melilotus albus** Medikus, white sweet clover, p. 894
♦**M. officinale** (L.) Pallas, yellow sweet clover, yellow melilot, p. 894

ONOBRYCHIS

♦**Onobrychis viciifolia** Scop., sainfoin, p. 936

ORBEXILUM [S, G, M: PSORALEA] (Isely, 1986b)

Orbexilum onobrychis (Nutt.) Rydb., French grass [S, M: *Psoralea onobrychis* Nutt.] (Isely, 1986b), p. 896
O. pedunculatum (Miller) Rydb., Sampson's snakeroot [S, G, M: *Psoralea psoralioides* (Walter) Cory] (Isely, 1986b), p. 896
var. pedunculatum [S, G, M: *Psoralea psoralioides* var. *eglandulosa* (Elliott) Freeman] (Isely, 1986b, 1988)

OXYTROPIS, locoweed

Oxytropis lambertii Nutt., purple locoweed, p. 911
var. lambertii

PEDIOMELUM [S, G: PSORALEA] (Isely, 1986b)

Pediomelum esculentum (Pursh) Rydb., prairie turnip, Indian breadroot, wild potato [S, G: *Psoralea esculenta* Pursh] (Isely, 1986b), p. 897

S: Steyermark G: Great Plains Flora M: Mohlenbrock

PHASEOLUS, bean

♦**Phaseolus lunatus** L., lima bean, butter bean, p. 950
var. lunonanus L. Bailey, dwarf sieva bean, dwarf lima bean
♦**P. polystachios** (L.) Britton, Sterns & Pogg., wild bean, p. 948
var. polystachios
♦**P. vulgaris** L., common bean, French bean, p. 950
var. humilis Alef., bush bean

PISUM, pea

♦**Pisum sativum** L., pea, garden pea, p. 947
var. arvense (L.) Poiret, field pea, Austrian winter pea
***var. sativum**, English pea (Mühlenbach, 1979)

PSORALEA (see ORBEXILUM, PEDIOMELUM, PSORALIDIUM)

PSORALIDIUM, scurfy pea [S, G, M: PSORALEA] (Isely, 1986b)

Psoralidium argophyllum (Pursh) Rydb., silvery psoralea, silverleaf scurf pea [S, G, M: *Psoralea argophylla* Pursh] (Isely, 1986b) (note that this species actually belongs in *Pediomelum* (Grimes, 1988), but a combination in that genus has not been published yet), p. 897
P. tenuiflorum (Pursh) Rydb., scurfy pea, few-flowered psoralea, wild alfalfa [S: *Psoralea tenuiflora* Pursh, incl. var. *floribunda* (Nutt.) Rydb., var. *tenuiflora* f. *alba* Steyerm.; G: *Psoralea tenuiflora*, incl. var. *floribunda*; M: *Psoralea tenuiflora*] (Isely, 1986b) (note that no valid combination under *Psoralidium* presently exists for f. *alba*), p. 896

PUERARIA, kudzu vine

♦**Pueraria lobata** (Willd.) Ohwi, kudzu vine, p. 956

RHYNCHOSIA

Rhynchosia difformis (Elliott) DC., p. 956
R. latifolia Nutt. ex Torrey & A. Gray, snout bean, p. 956
R. minima (L.) DC., see excluded taxa

ROBINIA, locust

♦**Robinia hispida** L., bristly locust, rose acacia, p. 907
var. hispida
R. pseudo-acacia L., black locust, p. 906

SCHRANKIA (see MIMOSACEAE)

SECURIGERA, crown vetch
[S, G, M: CORONILLA] (Lassen, 1989)

♦**Securigera varia** (L.) Lassen [**S, G, M:** *Coronilla varia* L.] (Lassen, 1989), crown vetch, p. 911

SENNA (see CAESALPINIACEAE)

SESBANIA

Sesbania exaltata (Raf.) Rydb. ex A. W. Hill, bequilla [**G, M:** *S. macrocarpa* Muhlenb.] (Wilbur, 1989), p. 904

STROPHOSTYLES, wild bean

Strophostyles helvula (L.) Elliott, p. 951
var. helvula
var. missouriensis (S. Watson) Britton
S. leiosperma (Torrey & A. Gray) Piper, slickseed bean, p. 952
S. umbellata (Muhlenb. ex Willd.) Britton, p. 951

STYLOSANTHES

Stylosanthes biflora (L.) Britton, Sterns & Pogg., pencil flower, p. 936

TEPHROSIA, hoary pea

Tephrosia virginiana (L.) Pers., goat's rue, hoary pea, catgut [S: incl. var. *holosericea* (Nutt.) Torrey & A. Gray] (Wood, 1949), p. 903

TRIFOLIUM, clover

♦**Trifolium arvense** L., rabbitfoot clover, p. 886
var. arvense
♦**T. aureum** Pollich, yellow clover, p. 888
ssp. aureum [S: *T. agrarium* L.] (Zohary and Heller, 1984)
♦**T. campestre** Schreber, large hop clover, low hop clover, Bishop clover, p. 890
var. campestre
T. carolinianum Michaux, p. 887
♦**T. dubium** Sibth., little hop clover, small hop clover, p. 890
♦**T. hybridum** L., Alsike clover, p. 887
var. elegans (Savi) Boiss. [S: *T. hybridum* var. *pratense* Rabenh.; M: *T. hybridum*] (Zohary and Heller, 1984)
♦**T. incarnatum** L., crimson clover, p. 886
var. incarnatum
♦**T. pratense** L., red clover, p. 885
var. pratense
f. leucochraceum Asch. & Prantl (note that Zohary and Heller (1984) did not include this forma in their monograph; their other segregates based on corolla color are recognized as varieties)
f. pratense
var. sativum Schreber [M: *T. pratense*] (Zohary and Heller, 1984)
T. reflexum L., buffalo clover, p. 888
var. glabrum Lojac. [G: *T. reflexum*] (Zohary and Heller, 1984)
var. reflexum

S: Steyermark G: Great Plains Flora M: Mohlenbrock

♦**Trifolium repens** L., white clover, p. 886
var. giganteum Larg.-Fossat, Ladino clover [S: *T. repens* f. *giganteum* Lagr.-Fossat] (Zohary and Heller, 1984) (note that this taxon was originally described as *β giganteum*; according to the International Code of Botanical Nomenclature (Greuter et al., 1988), art. 35.3, this should be interpreted as a variety; the combination as a forma does not presently exist)
var. repens, white clover, dutch white clover
♦**T. resupinatum** L., Persian clover, reversed clover, p. 886
var. resupinatum
T. stoloniferum Muhlenb. ex Eaton, running buffalo clover, p. 887

VICIA, vetch

Vicia americana Muhlenb. ex Willd., American vetch, p. 942
ssp. americana [S: incl. var. *truncata* (Nutt.) Brewer] (Gunn, 1968, 1979)
V. caroliniana Walter, wood vetch, pale vetch, p. 941
*♦**V. cracca** L., tufted vetch, Canada pea, bird vetch (Mühlenbach, 1979)
♦**V. grandiflora** Scop., bigflower vetch, p. 938
V. hirsuta (L.) Gray, see excluded taxa
V. ludoviciana Nutt., deer pea vetch, p. 941
var. ludoviciana
V. minutiflora Dietr., pygmy-flowered vetch, p. 941
♦**V. sativa** L., common vetch, spring vetch, p. 938
ssp. nigra (L.) Ehrh. [S: *V. sativa* var. *nigra* L., var. *segetalis* (Thuill.) Ser.; G: *V. sativa* var. *angustifolia* (L.) Wahlenb.] (Ball, 1968; Gunn, 1979; Voss, 1985b; E. Smith, 1988)
♦**V. tetrasperma** (L.) Schreber, sparrow vetch, slender vetch, p. 940
var. tetrasperma
♦**V. villosa** Roth, hairy vetch, woolly vetch, winter vetch, p. 941
ssp. varia (Host) Corbière [S, M: *V. dasycarpa* Ten.; G: *V. villosa* var. *glabrescens* Koch] (Ball, 1968; Voss, 1985b) (Gunn (1979) pointed out that the infraspecific taxonomy based on European plants does not account

(*Vicia villosa*, continued)
for all of the variation in New World materials; this complex requires further study)
ssp. villosa

VIGNA

♦**Vigna unguiculata** (L.) Walp., cowpea, black-eyed pea [S: *V. sinensis* (L.) Savi ex Hassk.] (Verdcourt, 1970), p. 950

WISTERIA, wisteria

Wisteria frutescens (L.) Poiret [S: incl. var. *macrostachya* (Nutt. ex Torrey & A. Gray) Torrey & A. Gray] (Gillis, 1980), p. 904

FAGACEAE, oak family

CASTANEA, chestnut

♦**Castanea dentata** (Marshall) Borhk., American chestnut, p. 530
C. pumila (L.) Miller, chinquapin, p. 531
var. ozarkensis (Ashe) G. Tucker, Ozark chinquapin, Ozark chestnut [S: *C. ozarkensis* Ashe] (Johnson, 1988)
***var. pumila** chinquapin, Allegheny chinquapin (Johnson, 1988)

FAGUS, beech

Fagus grandifolia Ehrh., American beech, p. 528
var. caroliniana (Loudon) Fern. & Rehder [S: incl. f. *mollis* Fern. & Rehder] (the infraspecific taxonomy of this species requires further study; Cooper and Mercer (1977) suggested recognition of two infraspecific taxa, although their morphometric data did not clearly support these varieties)

QUERCUS, oak

Quercus alba L., white oak [S: incl. f. *latiloba* (Sarg.) E. J. Palmer & Steyerm.] (Muller, 1951), p. 535
Q. x *anceps* E. J. Palmer, see named hybrids
Q. x *bebbiana* C. Schneider, see named hybrids
Q. bicolor Willd., swamp white oak, p. 538
Quercus x *bushii* Sarg., see named hybrids
Q. coccinea Muenchh., scarlet oak, p. 547
var. coccinea
var. tuberculata Sarg.
Q. x *deamii* Trel., see named hybrids
Q. x *egglestonii* Trel., see named hybrids
Q. ellipsoidalis E. Hill, northern pin oak, jack oak, Hill's oak, p. 545
Q. x *exacta* Trel., see named hybrids
Q. falcata Michaux, Spanish oak, southern red oak [S: incl. f. *angustior* E. J. Palmer & Steyerm., f. *triloba* (Michaux) E. J. Palmer & Steyerm.] (Ware, 1967; Jensen, 1989) (note that while f. *angustior* was not treated nomenclaturally by Ware (1967) and Jensen (1989), this morph falls within the range of variation in leaf morphology documented by these authors), p. 544
Q. x *fernowii* Trel., see named hybrids
Q. x *filialis* Little, see named hybrids
Q. x *hawkinsiae* Sudw., see named hybrids
Q. x *heterophylla* Michaux f., see named hybrids
Q. x *humidicola* E. J. Palmer, see named hybrids
Q. imbricaria Michaux, shingle oak, laurel oak, p. 540
**Q.* x *introgressa* P. Thompson, see named hybrids
Q. x *jackiana* C. Schneider, see named hybrids
Q. x *leana* Nutt., see named hybrids
Q. x *ludoviciana* Sarg., see named hybrids
Q. lyrata Walter, overcup oak, p. 536
f. lyrata
f. viridis Trel.

Quercus macrocarpa Michaux, bur oak, mossy cup oak [**S:** incl. f. *oliviformis* (Michaux f.) Trel.] (the validity of maintaining infraspecific taxa in *Q. macrocarpa* has not been examined in detail, but Muller (1951) indicated that f. *oliviformis* is part of a continuum of variation within this species), p. 537

Q. marilandica Muenchh., black jack oak, p. 543

Q. michauxii Nutt., swamp chestnut oak, basket oak, cow oak, p. 538

Q. x *moultonensis* Ashe, see named hybrids

Q. muehlenbergii Engelm., yellow chestnut oak, chinquapin, chinkapin [**S:** *Q. prinoides* Willd. var. *acuminata* (Michaux) Gleason, incl. f. *alexanderi* (Britton) Steyerm.; **M:** *Q. prinoides* var. *acuminata*] (Muller, 1951; Voss, 1985b), p. 539

Q. x *mutabilis* E. J. Palmer & Steyerm., see named hybrids

Q. nigra L., water oak, p. 543

Q. pagoda Raf., cherrybark oak [**S:** *Q. falcata* var. *pagodifolia* Elliott] (Ware, 1967; Jensen, 1989), p. 544

Q. palustris Muenchh., pin oak, p. 550

Q. phellos L., willow oak, p. 542

f. phellos

Q. prinoides Willd., dwarf chestnut oak, scrub oak, dwarf chinquapin, dwarf chinkapin, p. 539

Q. rubra L., red oak, northern red oak, p. 550

var. ambigua (A. Gray) Fern. [**S:** *Q. rubra* var. *borealis* (Michaux f.) Farw.; **G:** *Q. borealis* Michaux f.; **M:** *Q. rubra*] (there is no consensus on the proper level at which to recognize this taxon; see Voss (1985a) for brief discussion of the specific and varietal epithets and Thompson (1987) for discussion of the proper species name and arguments against maintaining varieties)

var. rubra

Q. x *runcinata* (A. DC.) Engelm., see named hybrids

Q. x *schuettei* Trel., see named hybrids

Q. shumardii Buckley, Shumard's oak, water oak, spotted oak, red oak, p. 548

var schneckii (Britton) Sarg., Schneck's oak

var. shumardii

S: Steyermark **G:** Great Plains Flora **M:** Mohlenbrock

Quercus stellata Wangenh., post oak (note that Thompson and Mohlenbrock (1979) reported the presence of hybrids between *Q. macrocarpa* and *Q. stellata* in western Missouri, which they referred to by the long-used name, *Q.* x *guadaloupensis* Sarg., but Muller (1951) noted that the type of this name is referrable to *Q. stellata*, rather than to such hybrids), p. 535

var. margaretta (Ashe) Sarg., sand post oak (note that this taxon is often treated as a separate species (cf. Muller, 1951) and requires further study)

var. stellata

Q. x *stelloides* E. J. Palmer, see named hybrids

Q. x *sterrettii* Trel., see named hybrids

Q. texana Buckley, Nuttall oak [S, M: *Q. nuttallii* E. J. Palmer] (Dorr and Nixon, 1985), p. 551

Q. x *tridentata* (A. DC.) Engelm., see named hybrids

Q. x *vaga* E. J. Palmer & Steyerm., see named hybrids

Q. velutina Lam., black oak, yellowbark oak, p. 544

f. missouriensis (Sarg.) Trel.

f. velutina

FUMARIACEAE, fumitory family [M: PAPAVERACEAE]

CORYDALIS, corydalis

Corydalis aurea Willd., golden corydalis, p. 726

ssp. aurea

ssp. occidentalis (Engelm.) Ownbey [S: *C. montana* Engelm.] (Ownbey, 1947)

C. crystallina Engelm., mealy corydalis, p. 725

C. flavula (Raf.) DC., pale corydalis, yellow fumewort, yellow harlequin, p. 725

C. micrantha (Engelm.) A. Gray, small-flowered corydalis, slender fumewort, p. 725

ssp. australis (Chapman) Ownbey [S: *C. halei* (Small) Fern. & B. G. Schubert] (Ownbey, 1947)

ssp. micrantha

DICENTRA, bleeding heart

Dicentra canadensis (Goldie) Walp., squirrel corn, p. 724
D. cucullaria (L.) Bernh., Dutchman's breeches, p. 724
f. cucullaria

FUMARIA, fumitory

***♦Fumaria officinalis** L., fumitory, earthsmoke, fumewort (Henderson, 1980)

GENTIANACEAE (see also MENYANTHACEAE)

BARTONIA

Bartonia paniculata (Michaux) Muhlenb., screwstem, p. 1191
ssp. paniculata

CENTAURIUM, centaury

♦Centaurium calycosum (Buckley) Fern., p. 1187
C. texense (Griseb.) Fern., p. 1187

GENTIANA, gentiana
[see also GENTIANELLA]

Gentiana andrewsii Griseb., closed gentian, bottle gentian, p. 1190
var. andrewsii
***var. dakotica** Nelson (Pringle, 1967)
G. clausa Raf., see excluded taxa
G. flavida A. Gray, pale gentian, white gentian, yellowish gentian [G, M: *G. alba* Muhlenb. ex A. Gray] (Wilbur, 1988), p. 1190
G. x *pallidocyanea* J. Pringle, see named hybrids
G. puberulenta J. Pringle, downy gentian [S: *G. puberula* Michaux] (Pringle, 1966), p. 1188

S: Steyermark G: Great Plains Flora M: Mohlenbrock

GENTIANELLA, stiff gentian
[S: GENTIANA] (Gillett, 1957)

Gentianella quinquefolia (L.) Small, stiff gentian, ague weed [S: *Gentiana quinquefolia* L.] (Gillett, 1957), p. 1188
ssp. occidentalis (A. Gray) J. M. Gillett [S: *Gentiana quinquefolia* var. *occidentalis* (A. Gray) A. Hitchc.] (Gillett, 1957)

OBOLARIA, pennywort

Obolaria virginica L., pennywort, p. 1192

SABATIA, marsh pink

Sabatia angularis (L.) Pursh, rose pink, rose gentian, p. 1186
f. albiflora House [M: *S. angularis*] (Wilbur, 1955)
f. angularis
S. brachiata Elliott, p. 1186
S. campestris Nutt., prairie rose gentian, p. 1187

SWERTIA, columbo
[M: FRASERA] (St. John, 1941)

Swertia caroliniensis (Walter) Kuntze, American columbo, green gentian [M: *Frasera caroliniensis* Walter] (St. John, 1941), p. 1191

GERANIACEAE, geranium family

ERODIUM, storksbill

Erodium cicutarium (L.) L'Hér. ex Aiton, filaree, alfilaria, pink needle, pin clover, p. 964
E. texanum A. Gray, large-flowered storksbill, p. 1652

GERANIUM, cranesbill

Geranium carolinianum L., Carolina cranesbill [S: incl. var. *confertiflorum* Fern.] (McCready and Cooperrider, 1984), p. 963
♦**G. dissectum** L., p. 963
G. maculatum L., wild geranium, spotted cranesbill, p. 963
f. maculatum
♦**G. molle** L., dovesfoot cranesbill, p. 964
♦**G. pusillum** L., small cranesbill, p. 963

GROSSULARIACEAE, currant family [S: SAXIFRAGACEAE]

ITEA [M: ESCALLONIACEAE]

Itea virginica L., Virginia willow, sweet-spire, tassel-white, p. 785
f. virginica

RIBES, gooseberry, currant

Ribes cynosbati L., prickly gooseberry, dogberry, p. 785
R. missouriense Nutt. ex Torrey & A. Gray, Missouri gooseberry, wild gooseberry [S: incl. var. *ozarkanum* Fassett] (Sinnott, 1985), p. 785
R. odoratum Wendl. f., golden currant, buffalo currant, Missouri currant, p. 785

GUTTIFERAE, see CLUSIACEAE

HALORAGACEAE, water milfoil family

MYRIOPHYLLUM, water milfoil

♦**Myriophyllum aquaticum** (Vell. Conc.) Verdc., parrot's feather, water feather [S, G: *M. brasiliense* Cambess.] (Verdcourt, 1973), p. 1110
M. heterophyllum Michaux, water milfoil, coontail, p. 1110
M. pinnatum (Walter) Britton, Sterns & Pogg., green parrot's feather, rough water milfoil, p. 1110
*♦**M. spicatum** L., Eurasian water milfoil (Couch and Nelson, 1986; Yatskievych, 1990)

PROSERPINACA, mermaid weed

Proserpinaca palustris L., p. 1111
var. amblyogona Fern.
var. crebra Fern. & Griscom [M: *P. palustris*] (the infraspecific taxonomy of *P. palustris* requires further study)
var. palustris

HAMAMELIDACEAE, witch hazel family

HAMAMELIS, witch hazel

Hamamelis vernalis Sarg., Ozark witch hazel, vernal witch hazel, p. 788
f. carnea Rehder
f. tomentella Rehder
f. vernalis
H. virginiana L., eastern witch hazel, American witch hazel, p. 786
f. virginiana

LIQUIDAMBAR, sweet gum

Liquidambar styraciflua L., sweet gum, American sweet gum, p. 788

S: Steyermark G: Great Plains Flora M: Mohlenbrock

HIPPOCASTANACEAE, horse chestnut family

AESCULUS, buckeye

Aesculus glabra Willd., Ohio buckeye, p. 1019
- **var. arguta** (Buckley) Robinson
- **var. glabra**
  - **f. glabra**
  - **f. pallida** (Willd.) Fern.
- **var. leucodermis** Sarg. (note that Hardin (1957) was unable to find correlation among the characters of leaf and bark said to differentiate this variety)

A. pavia L., red buckeye, p. 1022

HYDRANGEACEAE, hydrangea family [S: SAXIFRAGACEAE]

HYDRANGEA, hydrangea

Hydrangea arborescens L., wild hydrangea, sevenbark (note that plants with all of the flowers showy and functionally sterile which have been treated as formae by some authors, are best treated as cultivars, undeserving of formal taxonomic recognition), p. 782
- **ssp. arborescens** [**S:** *H. arborescens* var. *arborescens*, incl. f. *grandiflora* Rehder, var. *oblonga* Torrey & A. Gray, incl. f. *sterilis* (Torrey & A. Gray) H. St. John; **M:** *H. arborescens*] (McClintock, 1957)
- **ssp. discolor** (Ser.) McClint. [**S:** *H. arborescens* var. *deamii* H. St. John, incl. f. *acarpa* (Torrey & A. Gray) H. St. John; **M:** *H. arborescens*] (McClintock, 1957)

PHILADELPHUS, mock orange
[M: PHILADELPHACEAE]

*♦**Philadelphus coronarius** L., sweet mock orange (Mühlenbach, 1979) (note that the various garden morphs described as varieties of this species are best treated as cultivars, undeserving of formal taxonomic recognition)
P. pubescens Lois., p. 781
var. verrucosus (Schrader) S. Y. Hu

HYDROPHYLLACEAE, waterleaf family

ELLISIA

Ellisia nyctelea L., Aunt Lucy, waterpod, nyctelea, p. 1236

HYDROLEA

Hydrolea ovata Nutt., p. 1240
H. uniflora Raf., p. 1240

HYDROPHYLLUM, waterleaf

Hydrophyllum appendiculatum Michaux, woollen breeches, notchbract waterleaf, p. 1236
f. album Steyerm.
f. appendiculatum
H. canadense L., broadleaf waterleaf, p. 1234
H. virginianum L., waterleaf, Virginia waterleaf, John's cabbage, p. 1234
var. virginianum

PHACELIA, scorpionweed, phacelia

Phacelia bipinnatifida Michaux, p. 1238
P. gilioides Brand, hairy phacelia, p. 1237

Phacelia hirsuta Nutt., p. 1237
f. albiflora E. J. Palmer & Steyerm.
f. hirsuta
P. purshii Buckley, Miami mist, p. 1237
P. ranunculacea (Nutt.) Constance, p. 1238

HYPERICACEAE, see CLUSIACEAE

JUGLANDACEAE, walnut family

CARYA, hickory

Carya aquatica (Michaux f.) Nutt., water hickory, p. 516
C. cordiformis (Wangenh.) K. Koch, bitternut hickory, pignut hickory, p. 516
f. latifolia (Sarg.) Steyerm. (see note under *C. ovata* f. *ellipsoidalis*, below)
f. cordiformis
C. glabra (Miller) Sweet, pignut hickory, broom hickory, black hickory, p. 520
var. glabra
var. odorata (Marshall) Little, red hickory [**S:** *C. ovalis* (Wangenh.) Sarg., incl. var. *obcordata* (Muhlenb. & Willd.) Sarg. f. *obcordata*, var. *obcordata* f. *vestita* Sarg., var. *obovalis* Sarg., var. *odorata* (Marshall) Sarg., var. *ovalis*; **M:** *C. ovalis*] (Little, 1969, 1979) (note that the synonym var. *obcordata* has also been associated with var. *glabra* by some authors, but the type apparently has not been examined critically)
C. illinoensis (Wangenh.) K. Koch, pecan, p. 514
C. laciniosa (Michaux f.) Loudon, shellbark hickory, kingnut, p. 518
C. x *lecontei* Little, see named hybrids
C. x *nussbaumeri* Sarg., see named hybrids

Carya ovata (Miller) K. Koch, shagbark hickory, p. 517
var. ovata
f. ellipsoidalis (Sarg.) Steyerm. (the infraspecific taxonomy of this species requires further study; note that a number of authors, including Little (1979), have suggested that minor variants in this genus of morphologically plastic species are not worthy of taxonomic recognition)
f. fraxinifolia (Sarg.) Steyerm. [**M:** *C. ovata* var. *fraxinifolia* Sarg.] (see note under f. *ellipsoidalis*)
f. nuttallii (Sarg.) Steyerm. [**M:** *C. ovata* var. *nuttallii* Sarg.] (see note under f. *ellipsoidalis*)
f. ovata
C. texana Buckley, black hickory, Ozark pignut hickory [**S:** incl. var. *villosa* (Sarg.) Little] (Little, 1979), p. 522
f. glabra (E. J. Palmer & Steyerm.) Steyerm. (see note under *C. ovata* f. *ellipsoidalis*, above)
f. texana
C. tomentosa (Poiret) Nutt., mockernut hickory, white hickory (note that some authors continue to refer to this taxon as *C. alba* L., a name that should be rejected as a *nomen ambiguum* (*cf.* Little, 1979), p. 518
var. tomentosa (see note under *C. ovata* f. *ellipsoidalis*, above)
f. ficoidea (Sarg.) E. J. Palmer & Steyerm.
f. ovoidea (Sarg.) E. J. Palmer & Steyerm.
f. tomentosa
var. subcoriacea Sarg.

JUGLANS, walnut

Juglans cinerea L., butternut, p. 511
J. nigra L., black walnut, p. 510
f. nigra
f. oblonga (Marshall) Fern. [**M:** *J. nigra*] (there is no consensus on whether this rare variant is under genetic control, and it requires further study)

LABIATAE (see LAMIACEAE)

LAMIACEAE (LABIATAE), mint family

ACINOS

♦**Acinos arvensis** (Lam.) Dandy, mother of thyme [**S:** *Satureja acinos* (L.) Scheele] (DeWolf, 1954), p. 1297

AGASTACHE, giant hyssop

Agastache nepetoides (L.) Kuntze, yellow giant hyssop, p. 1276
A. scrophulariifolia (Willd.) Kuntze, purple giant hyssop, figwort giant hyssop [**S:** incl. f. *mollis* (Fern.) Steyerm.] (Vogelmann, 1983), p. 1278

BLEPHILIA

Blephilia ciliata (L.) Benth., Ohio horse mint, p. 1294
f. ciliata
B. hirsuta (Pursh) Benth., wood mint, p. 1294
var. hirsuta

CALAMINTHA, calamint, savory

Calamintha arkansana (Nutt.) Shinn., calamint, low calamint, Arkansas calamint [**S:** *Satureja arkansana* (Nutt.) Briq., incl. f. *alba* Steyerm.; **G:** *Satureja arkansana*] (DeWolf, 1954; Shinners, 1962c) (note that relationships between plants called *C. arkansana* and *C. glabella* (Michaux) Benth. have not been studied in detail and the name *C. arkansana* is here used inclusively for Missouri plants, pending further research; also, no combination presently exists for the name *Satureja arkansana* f. *alba* under *Calamintha*), p. 1297

COLLINSONIA, horse balm

Collinsonia canadensis L., richweed, citronella horse balm, p. 1307

CUNILA, dittany, stone mint

Cunila origanoides (L.) Britton, dittany, p. 1300

DRACOCEPHALUM, dragonhead

♦**Dracocephalum parviflorum** Nutt., dragonhead, American dragonhead, p. 1279

GALEOPSIS, hemp nettle

♦**Galeopsis tetrahit** L., common hemp nettle, p. 1285

GLECHOMA, ground ivy

♦**Glechoma hederacea** L., ground ivy, gill-over-the-ground, p. 1278
var. hederacea
var. micrantha Moric. [G: *G. hederacea*] (the validity of this taxon has not been investigated critically)

HEDEOMA, mock pennyroyal

Hedeoma hispidum Pursh, mock pennyroyal, rough false pennyroyal, p. 1296
H. pulegioides (L.) Pers., pennyroyal, American false pennyroyal, p. 1296

ISANTHUS (see TRICHOSTEMA)

LAMIUM, dead nettle

♦**Lamium amplexicaule** L., henbit, p. 1285
var. amplexicaule
f. amplexicaule
♦**L. purpureum** L., dead nettle, p. 1285
var. purpureum

LEONURUS

♦**Leonurus cardiaca** L., motherwort, p. 1284
*♦**L. marrubiastrum** L., biennial motherwort (Castaner and Priesendorf, 1989)
♦**L. sibiricus** L., p. 1284

LYCOPUS, bugleweed

Lycopus americanus Muhlenb. ex W. P. C. Barton, American bugleweed [S: incl. var. *longii* Benner] (Henderson, 1962), p. 1302
L. asper E. Greene, bugleweed, rough bugleweed, p. 1303
L. rubellus Moench, water horehound [S: incl. var. *lanceolatus* Benner, var. *arkansanus* (Fresen.) Benner] (Henderson, 1962), p. 1302
***L. uniflorus** Michaux, northern bugleweed, one-flowered horehound (Henderson, 1962)
L. virginicus L., bugle weed, Virginia bugleweed, p. 1302

MARRUBIUM, horehound

♦**Marrubium vulgare** L., common horehound, p. 1276

MELISSA, balm

♦**Melissa officinalis** L., lemon balm, bee balm, p. 1296
var. officinalis

MENTHA, mint

Mentha arvensis L., field mint [S: incl. var. *arvensis* f. *arvensis*, var. *arvensis* f. *glabra* (Benth.) Stewart, var. *villosa* (Benth.) Stewart f. *glabrata* (Benth.) Stewart, var. *villosa* f. *villosa*; M: incl. var. *villosa*] (infraspecific variation in this species is poorly understood and requires further study; see G: and Harley, 1972), p. 1304
M. x *gentilis* L., see named hybrids

S: Steyermark G: Great Plains Flora M: Mohlenbrock

♦**Mentha longifolia** (L.) Hudson, horsemint [**S:** incl. var. *mollissima* (Borkh.) Rouy, var. *undulata* (Willd.) Fiori & Paol.] (infraspecific variation in this species is poorly understood and requires further study; see Harley, 1972), p. 1307

M. x *piperita* L., see named hybrids

♦**M. spicata** L., spearmint, p. 1306

MONARDA, horsemint, wild bergamot

Monarda bradburiana Beck, beebalm, Bradbury beebalm [**S:** *M. russeliana* Nutt. ex Sims] (McClintock and Epling, 1942; Scora, 1967) (note that *M. russeliana* is a distinct species that is not known to occur in Missouri), p. 1290

M. citriodora Cerv. ex Lagasca, lemon mint, p. 1292
var. citriodora

M. clinopodia L., beebalm, p. 1292

♦**M. didyma** L., beebalm, Oswego tea, p. 1291

M. fistulosa L., wild bergamot, horsemint, p. 1291
ssp. fistulosa [**S:** incl. var. *mollis* (L.) Benth.] (Gill, 1977)

♦**M. pectinata** Nutt., spotted beebalm, plains beebalm, p. 1294

M. punctata L., dotted beebalm, horsemint, p. 1292
var. occidentalis (Epling) E. J. Palmer & Steyerm. [**G:** *M. punctata* ssp. *occidentalis* Epling; **M:** *M. punctata* var. *lasiodonta* A. Gray] (Scora, 1967)
var. villicaulis (Pennell) Shinn.

NEPETA, catnip

♦**Nepeta cataria** L., catnip, catmint, p. 1278

OCIMUM

♦**Ocimum basilicum** L., basil, p. 1308

PERILLA

♦**Perilla frutescens** (L.) Britton, beefsteak plant, p. 1308
var. crispa (Benth.) W. Deane
var. frutescens

PHYSOSTEGIA, false dragonhead

Physostegia angustifolia Fern., false dragonhead, p. 1281
P. intermedia (Nutt.) Engelm. & A. Gray, false dragonhead, p. 1282
P. virginiana (L.) Benth., false dragonhead, obedient plant, Virginia lionsheart, p. 1281
ssp. praemorsa (Shinn.) Cantino [**S:** *P. virginiana* f. *candida* Benke] (Cantino, 1982)
ssp. virginiana [**S:** *P. formosior* Lunell, *P. virginiana* var. *speciosa* (Sweet) A. Gray, var. *virginiana*; **M:** *P. speciosa* (Sweet) Sweet] (Cantino, 1982)

PRUNELLA, self-heal, heal-all

Prunella vulgaris L., self-heal, heal-all, p. 1279
var. lanceolata (W. P. C. Barton) Fern. [**M:** *P. vulgaris* var. *elongata* Benth.] (Fernald, 1913)
f. candida Fern.
f. iodocalyx Fern.
f. lanceolata
♦**var. vulgaris**
f. vulgaris

PYCNANTHEMUM, mountain mint

Pycnanthemum albescens Torrey & A. Gray, white mountain mint, p. 1300
P. muticum (Michaux) Pers., p. 1299
P. pilosum Nutt., hairy mountain mint, p. 1299
P. tenuifolium Schrader, slender mountain mint, p. 1299

Pycnanthemum torrei Benth., mountain mint, p. 1299
P. virginianum (L.) T. Durand & B. D. Jackson ex Robinson & Fern., mountain mint, p. 1299

SALVIA, sage

Salvia azurea Lam., blue sage, p. 1288
var. grandiflora Benth.
S. lyrata L., lyre-leaved sage, cancerweed, p. 1288
S. reflexa Hornem., lance-leaved sage, Rocky Mountain sage, p. 1288
♦**S. sclarea** L. clary, clear-eye, p. 1288

SATUREJA (see ACINOS, CALAMINTHA)

SCUTELLARIA, skullcap

Scutellaria australis (Fassett) Epling, small skullcap, southern small skullcap [S, G: *S. parvula* Michaux var. *australis* Fassett] (Epling, 1942) (the validity of maintaining this taxon at the species level requires further study), p. 1276
S. bushii Britton, skullcap, Bush's skullcap, p. 1273
S. elliptica Muhlenb., hairy skullcap, p. 1272
var. elliptica (note that Collins (1976) places plants previously attributed to var. *elliptica* from the northwestern part of the species' range in a separate variety, but the proper combination has not been published)
var. hirsuta (Short) Fern. [M: *S. elliptica*] (Collins, 1976)
S. galericulata L., marsh skullcap [S: *S. epilobiifolia* A. Ham.] (Epling, 1942), p. 1273
S. incana Biehler, hoary skullcap, downy skullcap, p. 1272
var. incana
var. punctata (Chapman) C. Mohr

Scutellaria lateriflora L., mad dog skullcap, p. 1273
f. albiflora (Farw.) Fern.
f. lateriflora
S. leonardii Epling, small skullcap, Leonard's skullcap [**S, G:** *S. parvula* var. *leonardii* (Epling) Fern.] (Epling, 1942) (the validity of maintaining this taxon at the species level requires further study), p. 1276
S. montana Chapman, see excluded taxa
S. nervosa Pursh, veiny skullcap, p. 1274
var. calvifolia Fern. [**M:** *S. nervosa*] (the validity of this variety has not been evaluated critically)
var. nervosa
f. alba Steyerm. [**M:** *S. nervosa*] (the distinctness of this forma has not been evaluated critically)
f. nervosa
S. ovata Hill, heart-leaved skullcap, egg-leaved skullcap, p. 1271
var. bracteata (Benth.) S. F. Blake [**S, M:** *S. ovata* var. *versicolor* (Nutt.) Fern.] (Pittman (1988) has presented a good argument that the epithet *versicolor* represents material best included in var. *ovata*)
var. ovata
var. rugosa (Alph. Wood) Fern. [**M:** *S. ovata* ssp. *rugosa* (Alph. Wood) Epling (this taxon is accepted arbitrarily at the varietal level here to avoid introducing two levels of infraspecific classification in the species)
S. parvula Michaux, small skullcap, p. 1274

STACHYS, hedge nettle

Stachys aspera Michaux, hyssop hedge nettle, hedge nettle [**S:** *S. hyssopifolia* Michaux var. *ambigua* A. Gray] (Mulligan and Munro, 1989), p. 1287
S. hispida Pursh, hairy hedge nettle [**S, M:** *S. tenuifolia* Willd. var. *hispida* (Pursh) Fern.] (Mulligan and Munro, 1989), p. 1287
***S. hyssopifolia** Michaux, hyssop hedge nettle, hedge nettle (Mulligan and Munro, 1989)

Stachys pilosa Nutt., woundwort, marsh betony [**S:** *S. palustris* var. *nipigonensis* Jennings, var. *phaneropoda* Weath., var. *pilosa* (Nutt.) Fern.; **G:** *S. palustris* ssp. *pilosa* (Nutt.) Epling; **M:** *S. palustris*, incl. var. *homotricha* Fern., var. *phaneropoda* Weath., var. *pilosa* (Nutt.) Fern.] (Mulligan and Munro, 1989), p. 1286

***var. arenicola** (Britton) G. Mulligan & D. Munro (Mulligan and Munro, 1989)

S. tenuifolia Willd., thinleaf betony, slenderleaf betony, p. 1286

TEUCRIUM, germander

Teucrium canadense L., wood sage, American germander, p. 1269

var. canadense [**S, M:** *T. canadense* var. *virginicum* (L.) Eaton] (Shinners, 1963)

var. occidentale (A. Gray) McClint. & Epling [**G, M:** *T. canadense* var. *boreale* (Bickn.) Shinn.] (Kartesz and Gandhi, 1989)

TRICHOSTEMA, blue curls
[S: incl. ISANTHUS] (Lewis, 1945)

Trichostema brachiatum L., false pennyroyal [**S:** *Isanthus brachiatus* (L.) Britton, Sterns & Pogg.] (Lewis, 1945), p. 1267

T. dichotomum L., blue curls, bastard pennyroyal [**S:** incl. var. *puberulum* Fern. & Griscom] (Lewis, 1945), p. 1267

T. setaceum Houtt., p. 1268

LAURACEAE, avocado family

LINDERA

Lindera benzoin (L.) Blume, spice bush, p. 718

var. benzoin

f. benzoin

var. pubescens (E. J. Palmer & Steyerm.) Rehder

L. melissifolia (Walter) Blume, pondberry, p. 718

SASSAFRAS, sassafras

Sassafras albidum (Nutt.) Nees, p. 716
var. albidum, sassafras, white sassafras
var. molle (Raf.) Fern., sassafras, red sassafras

LEGUMINOSAE
(see CAESALPINIACEAE, FABACEAE, MIMOSACEAE)

LEITNERIACEAE, corkwood family

LEITNERIA, corkwood

Leitneria floridana Chapman, p. 510

LENTIBULARIACEAE, bladderwort family

UTRICULARIA, bladderwort

Utricularia gibba L., humped bladderwort, swollen-spurred bladderwort, p. 1375
***U. macrorhiza** Le Conte, common bladderwort (Taylor, 1989) (note that this is the taxon called *U. vulgaris* in most North American floras)
U. vulgaris L., see excluded taxa

LIMNANTHACEAE, false mermaid family

FLOERKEA, false mermaid

Floerkea proserpinacoides Willd., 998

LINACEAE, flax family

LINUM, flax

Linum medium (Planchon) Britton, sucker flax, p. 958
var. texanum (Planchon) Fern.
♦**L. rigidum** Pursh, stiffstem flax, p. 957
***var. compactum** (Nelson) C. Rogers (Rogers, 1968) (note that although Rogers (1984) considered this variety to represent a separate species, *L. compactum* Nelson, both he and G: expressed difficulties in the separation of some specimens from *L. rigidum*)
var. *rigidum*, see excluded taxa
L. striatum Walter, wild flax, p. 958
L. sulcatum Riddell, grooved flax, p. 958
var. sulcatum
♦**L. usitatissimum** L., common flax, p. 957
***L. virginianum** L., wild flax (Rogers, 1963)

LOASACEAE, loasa family

MENTZELIA, stickleaf, blazing star

♦**Mentzelia albescens** (Gillies & Arn.) Griseb., p. 1653
M. oligosperma Nutt. ex Sims, p. 1084

LOGANIACEAE, logania family
(see also BUDDLEJACEAE)

CYNOCTONUM (see MITREOLA)

MITREOLA, miterwort

Mitreola petiolata (J. Gmelin) Torrey & A. Gray [S: *Cynoctonum mitreola* (L.) Britton] (Nelson, 1980), p. 1184

POLYPREMUM (see BUDDLEJACEAE)

SPIGELIA, pinkroot

Spigelia marilandica L., pinkroot, Indian pink, wormgrass, p. 1183

LORANTHACEAE (see VISCACEAE)

LYTHRACEAE, toothcup family

AMMANNIA, toothcup

Ammannia auriculata Willd., see excluded taxa
A. coccinea Rottb., 1089
***A. robusta** Heer & Regel (Graham, 1979, 1985)

CUPHEA, cuphea

Cuphea viscosissima Jacq., clammy cuphea, blue waxweed [S: *C. petiolata* (L.) Koehne] (Graham, 1975), p. 1092

DECODON

Decodon verticillatus (L.) Elliott, swamp loosestrife, water willow, p. 1090

DIDIPLIS, water purslane
[S: PEPLIS] (Graham, 1975)

Didiplis diandra (Nutt. ex DC.) Alph. Wood, water purslane, water hedge [S: *Peplis diandra* Nutt. ex DC.] (Graham, 1975), p. 1088

LYTHRUM, loosestrife

Lythrum alatum Pursh, winged loosestrife, p. 1090
var. alatum
♦**L. salicaria** L., purple loosestrife, spiked loosestrife, p. 1092

PEPLIS, see DIDIPLIS

ROTALA, toothcup

Rotala ramosior (L.) Koehne [**S:** incl. var. *interior* Fern. & Griscom] (Graham (1975) and **G:** have suggested that the quantitative differences between the varieties of this species do not merit taxonomic recognition), p. 1088

MAGNOLIACEAE, magnolia family

LIRIODENDRON

Liriodendron tulipifera L., tulip tree, yellow poplar, p. 671

MAGNOLIA, magnolia

Magnolia acuminata L., cucumber tree, cucumber magnolia, p. 669
var. acuminata
***M. tripetala** L., umbrella tree, umbrella magnolia (Harriman, 1969)

MALVACEAE, mallow family

ABUTILON, Indian mallow

♦**Abutilon theophrasti** Medikus, velvet-leaf, butter-print, p. 1052

ALCEA, hollyhock
[S, G: ALTHAEA] (Zohary, 1963a, b)

♦**Alcea rosea** L. [S, G: *Althaea rosea* (L.) Cav.] (Zohary, 1963a, b), p. 1045

ALTHAEA, see ALCEA

ANODA

♦**Anoda cristata** (L.) Schldl., p. 1052

CALLIRHOE, poppy mallow

Callirhoe alcaeoides (Michaux) A. Gray, pink poppy mallow, pale poppy mallow, p. 1049
C. bushii Fern., Bush's poppy mallow [S, G: *C. papaver* (Cav.) A. Gray var. *bushii* (Fern.) Waterf.] (Dorr, 1990), p. 1049
C. digitata Nutt., fringed poppy mallow, finger poppy mallow, p. 1050
C. involucrata (Torrey & A. Gray) A. Gray, purple poppy mallow, p. 1049
var. involucrata
C. papaver (Cav.) A. Gray, see excluded taxa
C. triangulata (Leavenw.) A. Gray, clustered poppy mallow, p. 1048

GOSSYPIUM, cotton

Gossypium herbaceum L., see excluded taxa
*♦**G. hirsutum** L. (Mühlenbach, 1979)

HIBISCUS

Hibiscus laevis All., rose mallow, halberd-leaved rose mallow [S: *H. militaris* Cav.] (Dandy, 1970; Blanchard, 1976), p. 1054
H. lasiocarpos Cav., rose mallow, hairy rose mallow, p. 1053
♦**H. syriacus** L., rose of Sharon, p. 1053
♦**H. trionum** L., flower-of-an-hour, Venice mallow, 1054

MALVA, mallow

♦**Malva moschata** L., musk mallow, p. 1046
f. laciniata (Desr.) Heyek
♦**M. neglecta** Wallr., common mallow, cheeses, p. 1046
♦**M. parviflora** L., small-fruited mallow, p. 1046
♦**M. rotundifolia** L., common mallow, cheeses, p. 1048
♦**M. sylvestris** L., high mallow, p. 1046
var. mauritiana (L.) Boiss.
var. sylvestris
♦**M. verticillata** L., curled mallow, clustered mallow, p. 1046
var. crispa L. [G: *M. verticillata*] (there is no consensus on the level at which this taxon should be recognized and some workers (e.g., Voss, 1985b) prefer to recognize it as a separate species, *M. crispa* (L.) L.)

MALVASTRUM, globe mallow

Malvastrum hispidum (Pursh) Hochr., yellow false mallow [S: *Sphaeralcea angusta* (A. Gray) Fern.; M: *Sidopsis hispida* (Pursh) Rydb.] (Bates, 1967; Hill, 1982), p. 1050

SIDA, sida

Sida elliottii Torrey & A. Gray, 1052
♦**S. spinosa** L., prickly sida, p. 1052

SPHAERALCEA, see MALVASTRUM

S: Steyermark G: Great Plains Flora M: Mohlenbrock

MARTYNIACEAE (see PEDALIACEAE)

MELASTOMATACEAE, melastome family

RHEXIA, meadow beauty

Rhexia mariana L., p. 1093
var. interior (Pennell) Kral & Bostick [S: *R. interior* Pennell] (Kral and Bostick, 1969)
var. mariana
R. virginica L., p. 1093

MELIACEAE, mahogany family

MELIA

♦**Melia azedarach** L., China berry tree, China tree, pride of India, p. 969

MENISPERMACEAE, moonseed family

CALYCOCARPUM

Calycocarpum lyonii (Pursh) A. Gray, cupseed, p. 716

COCCULUS

Cocculus carolinus (L.) DC., Carolina moonseed, Carolina snailseed, fishberry, p. 716

MENISPERMUM, moonseed

Menispermum canadense L., moonseed, yellow parilla, p. 714

MENYANTHACEAE, buckbean family [S: GENTIANACEAE]

MENYANTHES, buckbean

Menyanthes trifoliata L., buckbean, bogbean, p. 1192
var. minor Raf.

NYMPHOIDES, floating heart

♦**Nymphoides peltata** (S. Gmelin) Kuntze, p. 1194

MIMOSACEAE, mimosa family [S: LEGUMINOSAE, MIMOSOIDEAE]

ACACIA, acacia

Acacia angustissima (Miller) Kuntze, prairie acacia, p. 869
var. hirta (Nutt.) Robinson

ALBIZIA

*♦**Albizia julibrissin** Durazz., mimosa, silktree (Isely, 1973; Thompson, 1980)

DESMANTHUS, bundleflower

Desmanthus illinoensis (Michaux) MacMillan ex Robinson & Fern., prairie mimosa, Illinois bundleflower, p. 870
♦**D. leptolobus** Torrey & A. Gray, p. 870

SCHRANKIA, sensitive brier

Schrankia nuttallii (DC. ex Britton & Rose) Standley, sensitive brier, catclaw sensitive brier, bashful brier [**S, M:** *S. uncinata* Willd.] (Isely, 1973, 1986a), p. 870
var. nuttallii

MOLLUGINACEAE, carpetweed family [S: AIZOACEAE]

GLINUS

♦**Glinus lotoides** L., glinus, p. 632

MOLLUGO, carpetweed

♦**Mollugo verticillata** L., carpetweed, Indian chickweed, p. 632

MONOTROPACEAE, Indian pipe family [S, M: PYROLACEAE]

MONOTROPA, Indian pipe

Monotropa hypopithys L., pinesap, false beech drops, p. 1156
M. uniflora L., Indian pipe, ghost flower, p. 1156

MORACEAE, mulberry family (see also CANNABACEAE)

BROUSSONETIA

♦**Broussonetia papyrifera** (L.) Vent., paper mulberry, p. 563

CANNABIS (see CANNABACEAE)

HUMULUS (see CANNABACEAE)

MACLURA, Osage orange, bois-d'arc, bowwood, hedge apple

♦**Maclura pomifera** (Raf.) C. Schneider, p. 563

MORUS, mulberrry

♦**Morus alba** L., white mulberry, silkworm mulberry [**S:** incl. f. *macrophylla* (Loudon) C. Schneider, f. *skeletoniana* (C. Schneider) Rehder] (whether the various forms of white mulberry, which differ primarily in leaf size and dissection, are worthy of taxonomic recognition is debatable; most workers who have dealt with these plants in the wild (cf., Little, 1979; Mitchell, 1988) do not distinguish them), p. 562

M. rubra L., red mulberry, p. 562

NELUMBONACEAE, lotus family [S: NYMPHAEACEAE]

NELUMBO, lotus

Nelumbo lutea (Willd.) Pers., American lotus, p. 668

♦**N. nucifera** Gaertner, sacred lotus, East Indian lotus, p. 669

NYCTAGINACEAE, four-o'clock family

BOERHAAVIA, spiderling

♦**Boerhaavia erecta** L., p. 630

MIRABILIS, umbrellawort, four-o'clock

Mirabilis albida (Walter) Heimerl, white four-o'clock, pale umbrellawort, p. 628
M. hirsuta (Pursh) MacMillan, hairy four-o'clock, p. 628
M. linearis (Pursh) Heimerl, narrow-leaved four-o'clock, narrow-leaved umbrellawort, p. 628
M. nyctaginea (Michaux) Mac Millan, wild four-o'clock, heart-leaved umbrellawort, p. 628

NYMPHAEACEAE, water lily family
(see also CABOMBACEAE, NELUMBONACEAE)

BRASENIA (see CABOMBACEAE)

CABOMBA (see CABOMBACEAE)

NELUMBO (see NELUMBONACEAE)

NUPHAR, cowlily, spatterdock
yellow pond lily, yellow water lily

Nuphar lutea (L.) Sibth. & Smith (note that the question of species limits in this genus is controversial; if American plants are held as distinct from the European *N. lutea* sensu stricto, then both of our taxa would best be treated as subspecies of *N. advena* (Sol.) Aiton f.; however, the combination ssp. *ozarkana* has not been formally transferred to the latter species), p. 665

(*Nuphar lutea*, continued)

ssp. advena (Sol.) Kartesz & Gandhi [**S, G, M:** *N. lutea* ssp. *macrophyllum* (Small) E. Beal] (Kartesz and Gandhi, 1989)

ssp. ozarkana (G. Miller & Standley) E. Beal

NYMPHAEA, water lily

Nymphaea odorata Sol., fragrant water lily, white water lily [**S:** incl. var. *gigantea* Tricker, var. *odorata* f. *rubra* Guillon, *N. tuberosa* Paine; **G, M:** incl. *N. variegata*] (the taxonomy of this complex requires further research; field studies have indicated that many, if not all, of the characteristics previously thought to separate taxa are at least partially environmentally controlled; see Williams (1970) and Mitchell and Beal (1979) for discussion), p. 666

NYSSACEAE, tupelo family [S: CORNACEAE]

(Note that many authors continue to classify this group as part of the Cornaceae, including the leading students of the family; it is only because of our decision to follow Cronquist's (1981) system of classification that the Nyssaceae are here recognized; see Eyde (1988) for discussion.)

NYSSA, tupelo, sour gum

Nyssa aquatica L., swamp tupelo, cotton gum, tupelo, tupelo gum, p. 1154

N. sylvatica Marshall, black gum, sour gum, black tupelo, tupelo, p. 1155

var. sylvatica [**S, M:** incl. var. *caroliniana* (Poiret) Fern.] (Eyde, 1963)

OLEACEAE, olive family

CHIONANTHUS, fringe tree

Chionanthus virginicus L., fringe tree, old man's beard, p. 1182

FORESTIERA

Forestiera acuminata (Michaux) Poiret, swamp privet, p. 1182

FRAXINUS, ash

Fraxinus americana L., white ash, p. 1179
F. biltmoreana Beadle, Biltmore ash [**S:** *F. americana* var. *biltmoreana* (Beadle) J. Wright ex Fern.; **G, M:** *F. americana*] (Santamour, 1962; Black-Schaefer and Beckmann, 1989) (note that both *F. biltmoreana* and *F. profunda* have been suggested to represent hybrids between *F. americana* and *F. pennsylvanica*, a situation that requires further study), p. 1179
F. pennsylvanica Marshall, green ash, red ash [**S:** incl. var. *subintegerrima* (M. Vahl) Fern.] (Hardin, 1974), p. 1179
F. profunda (Bush) Bush, pumpkin ash, red ash [**S:** *F. tomentosa* Michaux f.] (Hardin, 1974) (see note above), p. 1179
F. quadrangulata Michaux, blue ash, 1180

LIGUSTRUM, privet

♦**Ligustrum ovalifolium** Hassk., California privet, p. 1183
L. vulgare L., see excluded taxa

SYRINGA, lilac

♦**Syringa vulgaris** L., common lilac, p. 1182

ONAGRACEAE, evening primrose family

CALYLOPHUS, evening primrose [S: OENOTHERA] (Towner, 1977)

Calylophus serrulatus (Nutt.) Raven, plains yellow primrose, toothed evening primrose [S: *Oenothera serrulata* Nutt.] (Towner, 1977), p. 1102

CIRCAEA

Circaea lutetiana L., enchanter's nightshade, p. 1108
ssp. canadensis (L.) Asch. & Magnus [S: *C. quadrisulcata* (Maxim.) Franchet & Savat. var. *canadensis* (L.) Hara] (Boufford, 1982) (note that the epithet *quadrisulcata* applies to an Old World subspecies of *C. lutetiana*)

EPILOBIUM, willow herb

Epilobium coloratum Sprengel, purple-leaved willow herb, cinnamon willow herb, p. 1099
E. leptophyllum Raf., narrow-leaved willow herb, bog willow herb, p. 1099

GAURA, gaura

Gaura biennis L., see excluded taxa
G. coccinea Pursh, scarlet gaura, p. 1107
G. longiflora Spach, large-flowered gaura [S: *G. biennis* var. *pitcheri* Torrey & A. Gray] (Raven and Gregory, 1972), p. 1107
G. parviflora Douglas, velvety gaura [S: incl. f. *glabra* Munz, f. *lachnocarpa* Weath.] (Raven and Gregory, 1972), p. 1107
***♦G. sinuata** Nutt. ex Ser., wavy-leaved gaura (Raven and Gregory, 1972; Mühlenbach, 1979)

JUSSIAEA (see LUDWIGIA)

LUDWIGIA, false loosestrife, seedbox
[S: incl. JUSSIAEA] (Hara, 1953; Raven, 1963)

Ludwigia alternifolia L., bushy seedbox [**S, M:** incl. var. *pubescens* E. J. Palmer & Steyerm.] (Lutz, 1986), p. 1096

L. decurrens Walter, erect primrose willow [**S:** *Jussiaea decurrens* (Walter) DC.] (Raven, 1963; Ramamoorthy and Zardini, 1987), p. 1094

L. glandulosa Walter, p. 1096

ssp. glandulosa

L. leptocarpa (Nutt.) H. Hara, hairy primrose willow [**S:** *Jussiaea leptocarpa* Nutt.] (Hara, 1953; Raven, 1963), p. 1095

L. microcarpa Michaux, p. 1098

L. palustris (L.) Elliott, water purslane [**S:** incl. var. *americana* (DC.) Fern & Griscom, var. *nana* Fern. & Grisc.; **M:** incl. var. *americana*] (Raven, 1963), p. 1098

L. peploides (Humb., Bonpl. & Kunth) Raven, floating primrose willow, creeping primrose willow [**S:** *Jussiaea repens* L. var. *glabrescens* Kuntze] (Raven, 1963) (note that nomenclature in this group is complex; according to Raven (1963), the type of *J. repens* L. represents an Asian species now referred to as *L. adscendens* (L.) H. Hara; the independent publication of the name *L. repens* Forster for the taxon previously known as *L. natans* (see Raven (1965) and below) precludes the direct transfer of the Linnaean epithet *repens* from *Jussiaea* to *Ludwigia*), p. 1094

ssp. glabrescens (Kuntze) Raven [**S:** *Jussiaea repens* L. var. *glabrescens* Kuntze; **G, M:** *L. peploides*] (Raven, 1963)

L. polycarpa Short & R. Peter, p. 1098

L. repens Forster [**S:** *Ludwigia natans* Elliott] (Raven, 1965) (see discussion under *L. peploides*, above), p. 1098

♦**L. uruguayensis** (Cambess.) H. Hara [**S:** *Jussiaea uruguayensis* Cambess.] (Hara, 1953; Raven, 1963), p. 1095

OENOTHERA, evening primrose (see also CALYLOPHUS)

Oenothera biennis L., common evening primrose [S: incl. var. *pycnocarpa* (Atk. & Barrlett) Wieg.] (Raven et al., 1979), p. 1100

*O. **clelandii** W. Dietr., Raven & W. L. Wagner (Dietrich & Wagner, 1988)

O. fruticosa L., sundrops, shrubby sundrops, p. 1104

ssp. fruticosa [S: *O. fruticosa* var. *linearis* (Michaux) S. Watson] (Straley, 1977)

ssp. glauca (Michaux) Straley [S: *O. tetragona* Roth var. *hybrida* (Michaux) Fern.] (Straley, 1977)

♦O. **grandiflora** L'Her. ex Aiton, p. 1102

O. grandis (Britton) Smyth, cut-leaved evening primrose [S: *O. laciniata* var. *grandiflora* (S. Watson) Robinson] (Dietrich and Wagner, 1988), p. 1102

*♦O. **heterophylla** Spach (Mühlenbach, 1983; Dietrich and Wagner, 1988)

ssp. heterophylla

O. kunthiana (Spach) Munz, see excluded taxa

O. laciniata Hill, cut-leaved evening primrose, ragged evening primrose, p. 1102

O. linifolia Nutt., sundrops, thread-leaved sundrops, p. 1104

O. macrocarpa Nutt., Missouri primrose [S: *O. missouriensis* Sims] (Wagner, 1981), p. 1105

ssp. macrocarpa

O. perennis L., sundrops, small sundrops, p. 1105

O. pilosella Raf., sundrops, prairie sundrops, p. 1104

ssp. pilosella [S: incl. f. *laevigata* E. J. Palmer & Steyerm.] (Straley, 1977)

O. rhombipetala Nutt. ex Torrey & A. Gray, sand primrose, p. 1102

O. speciosa Nutt., white evening primrose, showy evening primrose, p. 1105

Oenothera triloba Nutt., stemless evening primrose, p. 1106
O. villosa Thunb., common evening primrose [**S, M:** *O. biennis* L.] (Dietrich and Raven, 1976; Raven et al., 1979), p. 1101
ssp. villosa [**S:** *O. biennis* var. *canescens* Torrey & A. Gray, var. *hirsutissima* A. Gray; **M:** *O. biennis* var. *canescens* Torrey & A. Gray] (Munz, 1965; Dietrich and Raven, 1976; Raven et al., 1979) (note that the presently accepted subspecies are based upon different morphological characters than were the varietal epithets used in most previous midwestern floras; there is little correlation between the nomenclatural synonymy in this group and the actual determinations for Missouri specimens, using modern nomenclature)

STENOSIPHON

Stenosiphon linifolius (Nutt.) Heynh., p. 1107

OROBANCHACEAE, broomrape family

EPIFAGUS, beechdrops

Epifagus virginiana (L.) W. P. C. Barton, p. 1374

OROBANCHE, broomrape

Orobanche ludoviciana Nutt. (note that according to Collins (1973), the type of *O. ludoviciana* represents the western species that otherwise has been called *O. multiflora* Nutt.; a new name for our northeastern species unfortunately has not been published), p. 1374
***O. multiflora** Nutt. (Smith, 1990) (see note above)
O. uniflora L., one-flowered cancer-root, small cancer-root, p. 1374

OXALIDACEAE, wood sorrel family

OXALIS, wood sorrel

♦**Oxalis corniculata** L., creeping lady's sorrel, p. 959
O. florida Salisb., yellow wood sorrel [**S:** *O. dillenii* Jacq.] (Lourteig, 1979), p. 959
***ssp. florida** (Lourteig, 1979)
ssp. prostrata (Haw.) Lourt. [**S:** *O. dillenii* ssp. *filipes* (Small) Eiten] (Lourteig, 1979)
O. fontana Bunge, yellow wood sorrel, lady's sorrel [**S, G, M:** *O. stricta* L.] (Lourteig, 1979) (note that although Lourteig (1979) pointed out that *O. fontana* is the oldest correct name for this taxon, Eiten's (1963) assessment of infraspecific variation in the species is more reasonable; thus *O. fontana* var. *bushii* (Small) Hara, recognized by Lourteig (1979) and with type from Missouri, is here relegated to synonymy), p. 960
O. lyonii Pursh, see excluded taxa
O. stricta L., yellow wood sorrel, gray-green wood sorrel [**S, G, M:** *O. dillenii* Jacq.] (Lourteig, 1979), p. 959
O. violacea L., violet wood sorrel [**S:** incl. var. *trichophora* Fassett, var. *violacea* f. *albida* Fassett] (Denton, 1973), p. 959

PAPAVERACEAE, poppy family

ARGEMONE, prickly poppy

♦**Argemone albiflora** Hornem., white prickly poppy, p. 723
ssp. albiflora
ssp. texana Ownbey
♦**A. mexicana** L., devil's fig, Mexican prickly poppy, p. 723
f. mexicana

CHELIDONIUM, celandine

♦**Chelidonium majus** L., p. 720

S: Steyermark **G:** Great Plains Flora **M:** Mohlenbrock

ESCHSCHOLZIA, gold poppy

♦**Eschscholzia californica** Cham., California poppy (note that there is controversy concerning whether the present spelling of the generic name was an intentional decision by Linnaeus or whether it was an orthographic error to be corrected to "*Eschscholtzia*"; see Ernst (1962) for discussion), p. 1652

PAPAVER, poppy

♦**Papaver dubium** L., blind eyes, longhead poppy, p. 722
♦**P. rhoeas** L., corn poppy, field poppy, Shirley poppy, p. 722
♦**P. somniferum** L., common poppy, opium poppy, p. 722

SANGUINARIA, bloodroot, red puccoon

Sanguinaria canadensis L., p. 719
var. canadensis
f. canadensis
var. rotundifolia (E. Greene) Fedde [**M:** *S. canadensis*] (the status of this taxon requires further study)

STYLOPHORUM, wood poppy

Stylophorum diphyllum (Michaux) Nutt., celandine poppy, wood poppy, p. 720

PASSIFLORACEAE, passion-flower family

PASSIFLORA, passion flower

Passiflora incarnata L., maypops, apricot vine, passion flower, p. 1083
P. lutea L., p. 1083
var. glabriflora Fern.

PEDALIACEAE, pedalium family
[S, M: incl. MARTYNIACEAE]

PROBOSCIDEA

Proboscidea louisianica (Miller) Thell., devil's claw, unicorn plant, ram's horn, proboscis flower, p. 1372
ssp. louisianica

SESAMUM, sesame, bené

♦**Sesamum orientale** L. [S: *S. indicum* L.] (Seegeler, 1989), p. 1371

PHRYMACEAE (see VERBENACEAE)

PHYTOLACCACEAE, pokeweed family

PHYTOLACCA

Phytolacca americana L., pokeweed, poke, p. 630

PLANTAGINACEAE, plantain family

PLANTAGO, plantain

*♦**Plantago arenaria** Waldst. & Kit., Indian plantain, whorled plantain [*P. indica* L.] (Mühlenbach, 1983) (nomenclature of this taxon is controversial, due to a variety of problems; most authors presently agree that *P. indica* is an illegitimate name, but the question of whether another applicable binomial, *P. psyllium* L., is a *nomen ambiguum*, remains to be resolved; see Rosatti (1984) for discussion)
P. aristata Michaux, bracted plantain, buckhorn, p. 1384

Plantago cordata Lam., heartleaf plantain, p. 1381
P. heterophylla Nutt., small plantain, p. 1386
♦**P. lanceolata** L., English plantain, buckhorn, rib grass [**S:** incl. var. *sphaerostachya* Mert. & Koch f. *sphaerostachya*, var. *sphaerostachya* f. *eriophora* (Hoffsgg. & Link) G. Beck] (Tessene, 1968), p. 1382
♦**P. major** L., common plantain, broad-leaved plantain, white man's foot, p. 1382
P. patagonica Jacq., salt-and-pepper plant, Pursh plantain, Patagonian plantain [**S:** *P. purshii* Roemer & Schultes, *P. spinulosa* Decne.; **G:** incl. var. *breviscapa* (Shinn.) Shinn., var. *spinulosa* (Decne.) A. Gray; **M:** incl. var. *breviscapa* (as var. *brevicarpa* (Shinn.) Shinn., a misprint)] (Rahn, 1978) (note that infraspecific variation in this species requires further study), p. 1385
P. pusilla Nutt., small plantain, slender plantain (note that the relationships between the two variants of this species and the very similar *P. elongata* Pursh of the western United States require further study), p. 1385
var. major Engelm.
var. pusilla
♦**P. rhodosperma** Decne., red-seeded plantain, p. 1385
P. rugelii Decne., Rugel's Plantain, broad-leaved plantain, p. 1382
P. virginica L., hoary plantain, pale-seeded plantain, p. 1385
♦**P. wrightiana** Decne., Wright's plantain, p. 1653

PLATANACEAE, plane tree family

PLATANUS, sycamore, plane tree

Platanus occidentalis L., sycamore, American plane tree, buttonwood [S: incl. var. *glabrata* (Fern.) Sarg., var. *occidentalis* f. *attenuata* Sarg.] (although most authors (e.g., Mitchell, 1988) have remarked on the within-tree variability of minor leaf characters and suggested that recognition of infraspecific taxa based on such criteria is unwarranted, Hsiao (1973) suggested that var. *glabrata* was worthy of some form of nomenclatural recognition, based on morphometric and phytochemical studies; further research is clearly necessary), p. 789

PLUMBAGINACEAE, leadwort family

CERATOSTIGMA

*♦**Ceratostigma plumbaginoides** Bunge, ceratostigma (Dunn, 1982)

POLEMONIACEAE, phlox family

COLLOMIA, collomia

♦**Collomia linearis** Nutt., p. 1225

GILIA (see IPOMOPSIS)

IPOMOPSIS
[S: GILIA] (Grant, 1956)

♦**Ipomopsis rubra** (L.) Wherry, standing cypress [S: *Gilia rubra* (L.) A. A. Heller] (Grant, 1956), p. 1225

PHLOX, phlox

Phlox amplifolia Britton, broadleaf phlox, p. 1232
P. bifida Beck, cleft phlox, sand phlox, p. 1228
ssp. bifida
ssp. stellaria (A. Gray) Wherry [S: *P. bifida* var. *stellaria* (A. Gray) Wherry] (Wherry, 1955; Marsh, 1960) (note that in this species, as well as in all other species of Missouri *Phlox*, the decision to recognize subspecies, rather than varieties, is arbitrary, although it brings the nomenclature in line with the majority of other regional treatments of this genus)
P. carolina L., Carolina phlox, p. 1232
ssp. angusta [S: *P. carolina* var. *angusta* (Wherry) Steyerm.] (Wherry, 1955)
ssp. carolina
P. divaricata L., blue phlox, wild sweet William, p. 1228
ssp. laphamii (Alph. Wood) Wherry [S: *P. divaricata* var. *laphamii* Alph. Wood] (Wherry, 1955)
f. albiflora (Dwight Moore) McGregor [S: *P. divaricata* var. *laphamii* f. *candida* E. J. Palmer & Steyerm.] (McGregor, 1957)
f. laphamii
♦**P. drummondii** Hook., annual phlox, p. 1233
var. peregrina Shinn. (note that the Missouri specimens were not determined at the varietal level in previous works)
P. glaberrima L., smooth phlox, p. 1230
ssp. interior (Wherry) Wherry [S: *P. glaberrima* var. *interior* Wherry] (Wherry, 1955)
P. maculata L., wild sweet William, sweet William phlox, meadow phlox, p. 1232
ssp. pyramidalis (Smith) Wherry [S: *P. maculata* var. *pyramidalis* (Smith) Wherry] (Wherry, 1955)
P. paniculata L., perennial phlox, summer phlox, garden phlox, p. 1232
f. alba Don
f. paniculata

Phlox pilosa L., prairie phlox, downy phlox, p. 1229
- **ssp. fulgida** (Wherry) Wherry [**S:** *P. pilosa* var. *fulgida* Wherry, incl. f. *albiflora* (MacMillan) Standley] (Wherry, 1955; Levin, 1966) (note that in the interests of uniformity, the variant with white corollas probably should continue to be recognized as a forma, but the epithet *albiflora* has yet to be transferred to ssp. *fulgida*)
- **ssp. ozarkana** (Wherry) Wherry [**S:** *P. pilosa* var. *ozarkana* Wherry] (Wherry, 1955; Levin, 1966)
- **ssp. pilosa**
- **ssp. pulcherrima** Lundell [**S:** *P. pilosa* var. *amplexicaulis* (Raf.) Wherry] (Wherry, 1955; Levin, 1966)

POLEMONIUM, Jacob's ladder

Polemonium reptans L., Jacob's ladder, Greek valerian, creeping polemonium, p. 1224
- **var. reptans**

POLYGALACEAE, milkwort family

POLYGALA, milkwort

Polygala incarnata L., pink milkwort, slender milkwort, p. 970

P. sanguinea L., field milkwort, blood polygala, p. 970
- **f. sanguinea**
- **f. albiflora** (Wheelock) Millsp. [**M:** *P. sanguinea*] (the validity of this taxon requires further study)
- **f. viridescens** (L.) Farw. [**M, G:** *P. sanguinea*] (the validity of this taxon requires further study)

P. senega L., Seneca snakeroot [**S, G:** incl. var. *latifolia* Torrey & A. Gray] (the validity of this taxon requires further study; see Burns (1986) for discussion), p. 970

Polygala verticillata L., whorled milkwort, p. 972
var. ambigua (Nutt.) Alph. Wood [**S:** incl. var. *dolichoptera* Fern.] (Burns (1986) presented a detailed account of the tortuous nomenclatural and taxonomic history of the *P. verticillata* complex and his sensible treatment is here followed for Missouri plants, pending much-needed further research)
var. verticillata [**S, G:** incl. var. *isocycla* Fern., var. *sphenostachya* Pennell; **M:** incl. var. *isocycla*] (see discussion under var. *ambigua*, above)

POLYGONACEAE, smartweed family

BRUNNICHIA

Brunnichia ovata (Walter) Shinn., ladies' eardrops, buckwheat vine [**S:** *B. cirrhosa* Gaertner] (Shinners, 1967), p. 600

ERIOGONUM, wild buckwheat

Eriogonum longifolium Nutt., umbrella plant, p. 574
var. longifolium

FAGOPYRUM, buckwheat

♦**Fagopyrum esculentum** Moench, common buckwheat [**S:** *F. sagittatum* Gilib.] (Voss, 1985b), p. 598

POLYGONELLA, jointweed

Polygonella americana (Fischer & C. Meyer) Small, p. 598

POLYGONUM, knotweed, smartweed

(Note that there is increasing acceptance for the division of the traditional *Polygonum* into several, more homogeneous genera (cf., Hickman, 1984), particularly following the studies of Haraldson (1978), who used a novel set of correlating characters to redefine generic and infrageneric limits in subfamily Polygonoideae; confusion concerning the transfer of some taxa, particularly below the species level, to the segregate genera has forced us to continue treating this group in its traditional, broad sense for the present; synonyms in the segregate genera *Fallopia*, *Persicaria*, and *Reynoutria* (sensu Haraldson, 1978) are given in the species' synonymy, but without further literature citation.)

♦**Polygonum achoreum** S. F. Blake, knotweed, p. 586

P. amphibium L., water smartweed, shoestring smartweed, swamp smartweed [*Persicaria amphibia* (L.) Gray], p. 588

var. emersum Michaux [**S:** *Polygonum coccineum* Muhlenb. ex Willd. var. *coccineum*, incl. f. *natans* (Wieg.) Stanford, var. *pratincola* (E. Greene) Stanford] (Mitchell, 1968, 1976; Mitchell and Dean, 1978)

var. stipulaceum N. Coleman [**S:** *Polygonum amphibium* var. *stipulaceum* f. *fluitans* (Eaton) Fern.; **M:** *P. amphibium*] (Mitchell, 1968, 1976; Mitchell and Dean, 1978)

♦**P. arenastrum** Jordan ex Boreau, knotweed [**S:** *Polygonum aviculare*] (Styles, 1962; Mertens and Raven, 1965; Mitchell and Dean, 1978; Wolf and McNeill, 1986), p. 586

P. arifolium L., halberd-leaved tear-thumb [*Persicaria arifolia* (L.) Haraldson; **S, M:** incl. var. *pubescens* (Keller) Fern.] (Park, 1988), p. 596

♦**P. aviculare** L., knotweed, knotgrass, dooryard weed, hogweed [**S:** incl. var. *littorale* (Link) Koch, var. *vegetum* Ledeb.] (Styles, 1962) (note that the traditional taxon *P. aviculare* has been shown to be heterogeneous and Missouri material, as here treated, falls into four different *Polygonum* species: *P. arenastrum* Jordan ex Boreau, *P. aviculare* sensu stricto, *P. buxiforme* Small, and *P. neglectum* Besser; although all the varieties

(*Polygonum aviculare*, continued)
accepted by **S:** apparently are nomenclaturally equivalent to *P. aviculare*, the plants earlier assigned to these varieties show little consistency as to actual determinations; much work will be necessary to compile accurate distributional maps for each of the segregate species within the *P. aviculare* complex), p. 586

P. bicorne Raf., pink smartweed [*Persicaria bicornis* (Raf.) Nieuwl.] (note that Mitchell and Dean (1978) have expressed reservations as to the distinctness of this taxon from *Polygonum pensylvanicum*), p. 590

P. buxiforme Small, knotweed [**S:** *Polygonum aviculare*] (Mitchell and Dean, 1978), p. 586

♦**P. cespitosum** Blume [*Persicaria cespitosa* (Blume) Nakai], p. 592
var. longisetum (Bruijn) Steward

♦**P. convolvulus** L., black bindweed, climbing buckwheat, wild buckwheat [*Fallopia convolvulus* (L.) A. Löve], p. 597

♦**P. cuspidatum** Siebold & Zucc., Japanese knotweed, Mexican bamboo, Japanese bamboo [*Reynoutria japonica* Houtt.], p. 597
var. cuspidatum
***var. compactum** (Hook. f.) L. Bailey (Mühlenbach, 1983) (note that this variation might best be treated as a cultivar)

P. densiflorum Meissner [*Persicaria densiflora* (Meissner) Mold.], p. 588

P. erectum L., erect knotweed, p. 586

P. hydropiper L., water pepper, smartweed [*Persicaria hydropiper* (L.) Opiz], p. 591

P. hydropiperoides Michaux, wild water pepper, mild water pepper [*Persicaria hydropiperoides* (Michaux) Small; **S:** incl. var. *hydropiperoides* f. *strigosum* (Small) Stanford, var. *opelousanum* (Riddell ex Small) Stone; **M:** incl. *Polygonum opelousanum* Riddell ex Small] (Horton, 1972; McDonald, 1980), p. 593

Polygonum lapathifolium L., pale smartweed [*Persicaria lapathifolia* (L.) Gray; **M:** incl. *Polygonum scabrum* Moench] (Mitchell and Dean, 1978) (note that plants attributed to *P. scabrum* were also reported for Missouri by Mühlenbach (1979)), p. 591

♦**P. neglectum** Besser, knotweed [**S:** *Polygonum aviculare*] (Mitchell and Dean, 1978; Wolf and McNeill, 1986), p. 586

♦**P. orientale** L., prince's feather, kiss-me-over-the-garden-gate [*Persicaria orientalis* (L.) Spach], p. 591

P. pensylvanicum L., pinkweed, common smartweed, Pennsylvania smartweed [*Persicaria pensylvanica* (L.) M. Gómez], p. 590

var. laevigatum Fern. [**S:** incl. var. *eglandulosum* Myers] (E. Smith, 1988)

f. laevigatum

f. albineum Farw.

var. pensylvanicum

♦**P. persicaria** L., lady's thumb, heart's ease, smartweed, heartweed [*Persicaria vulgaris* Webb & Moq.] (note that there is controversy surrounding the proper epithet for this taxon in *Persicaria*), p. 592

P. prolificum (Small) Robinson, knotweed [**G:** *Polygonum ramosissimum* Michaux] (Wolf and McNeill, 1986), p. 584

P. punctatum Elliott, water smartweed [*Persicaria punctata* (Elliott) Small], p. 592

var. confertiflorum (Meissner) Fassett

var. majus (Meissner) Fassett

var. punctatum

P. ramosissimum Michaux, bushy knotweed, long-fruited knotweed [**M:** incl. *Polygonum exsertum* Small] (Mertens and Raven, 1965; Wolf and McNeill, 1986), p. 584

f. ramosissimum

P. sagittatum L., arrow-leaved tear-thumb [*Persicaria sagittata* (L.) Haraldson], p. 596

Polygonum scandens L., false buckwheat, crested buckwheat [*Fallopia scandens* (L.) Holub; **S:** incl. var. *cristatum* (Engelm. & A. Gray) Gleason; **G:** incl. var. *dumetorum* (L.) Gleason; **M:** incl. *Polygonum cristatum* Engelm. & A. Gray] (the present, conservative treatment follows that of Horton (1972), but readers should note that there is disagreement as to the treatment of this complex, and as pointed out Mitchell and Dean (1978), the situation requires further study), p. 597

P. setaceum Baldwin ex Elliott, water pepper [*Persicaria setacea* (Baldwin ex Elliott) Small; **S:** *Polygonum hydropiperoides* var. *setaceum* (Baldwin ex Elliott) Gleason; **M:** incl. var. *interjectum* Fern.] (Horton, 1972; McDonald, 1980), p. 594

P. tenue Michaux, slender knotweed, p. 587

P. virginianum L., Virginia knotweed, jumpseed [*Persicaria virginiana* (L.) Gaertner], p. 596

var. glaberrimum (Fern.) Steyerm.

var. virginianum

RUMEX, dock, sorrel

♦**Rumex acetosella** L., sheep sorrel, red sorrel, field sorrel, sour dock (note that the application of infraspecific epithets to North American material is presently uncertain; Mitchell and Dean (1978) and den Nijs (1983) indicated that most North American specimens should be referred to as ssp. *angiocarpus* (Murb.) Murb., but other infraspecific taxa may also be present), p. 577

R. altissimus Alph. Wood, pale dock, peach-leaved dock, tall dock, p. 578

♦**R. conglomeratus** Murray, p. 581

♦**R. crispus** L., curly dock, sour dock, yellow dock, p. 580

*♦**R. cristatus** DC., crested dock (Shildneck et al., 1981; Mühlenbach, 1983)

*♦**R. dentatus** L. (Mühlenbach, 1979) (note that the scanty North American materials have not been determined at the infraspecific level yet)

R. hastatulus Baldwin ex Elliott, wild sorrel, sour dock, heartwing sorrel, p. 578

Rumex maritimus L., golden dock, p. 581
var. fueginus (Philippi) Dusén
♦**R. obtusifolius** L., bitter dock, blunt-leaved dock, broad-leaved dock, red-veined dock, p. 581
R. orbiculatus A. Gray, see excluded taxa
♦**R. patientia** L., patience dock, monk's rhubarb, passion dock, p. 578
♦**R. pulcher** L., fiddle dock, p. 581
♦**R. stenophyllus** Ledeb., p. 580
R. triangulivalvis (Danser) Rech. f., willow-leaved dock [**S, G, M:** *R. mexicanus* Meissner] (Rechinger, 1937; Mitchell and Dean, 1978) (note that there continues to be confusion as to the distinctness of taxa in the *R. salicifolius* complex; see Hickman (1984) for a different viewpoint), p. 578
R. verticillatus L., swamp dock, water dock, p. 578

PORTULACACEAE, purslane family

CLAYTONIA, spring beauty

Claytonia virginica L., Virginia spring beauty, spring beauty [**S:** incl. f. *robusta* (Somes) E. J. Palmer & Steyerm.] (Doyle, 1981), p. 636

PORTULACA, purslane

♦**Portulaca grandiflora** Hook., portulaca, moss rose, rose moss, p. 634
P. oleracea L., common purslane, pusley, pursley [**S:** incl. *P. neglecta* Mackenzie & Bush, *P. retusa* Engelm.; **G:** incl. *P. retusa*] (Legrand, 1962; Matthews and Levins, 1985b) (infraspecific variation in this complex taxon has not been treated satisfactorily; Danin et al. (1978) attempted to correlate ploidy and seed morphology and recognized 9 subspecies of *P. oleracea*, of which ssp.

(*Portulaca oleracea*, continued)
granulato-stellulata (Poelln.) Danin & H. G. Baker, ssp. *nicaraguensis* Danin & H. G. Baker, ssp. *nitida* Danin & H. G. Baker, and ssp. *oleracea* were mapped as occurring in Missouri, but none of the other named variants was synonymized with these subspecies and in practice the minor differences in seed-coat morphology do not serve to separate Missouri plants adequately; thus no infraspecific taxa are accepted here), p. 633

P. pilosa L. [S, G: *P. mundula* I. M. Johnston] (Matthews and Levins, 1985a, b), p. 634

TALINUM, rock pink

Talinum calycinum Engelm., fame flower, flame flower, rock pink, large flower-of-an-hour, p. 636

T. parviflorum Nutt. ex Torrey & A. Gray, prairie fame flower, rock pink, small flower-of-an-hour, p. 636

PRIMULACEAE, primrose family

ANAGALLIS, pimpernel
[S, G: incl. CENTUNCULUS]
(Taylor, 1955; Channell and Wood, 1959)

♦**Anagallis arvensis** L., scarlet pimpernel, poor man's weatherglass, p. 1171

ssp. arvensis

ssp. *caerulea* (Schreber) Vollm., see excluded taxa

A. minima (L.) E. H. Krause, chaffweed [S, G: *Centunculus minimus* L.] (Taylor, 1955; Channell and Wood, 1959), p. 1171

ANDROSACE, rock jasmine

Androsace occidentalis Pursh, western rock jasmine, p. 1165

CENTUNCULUS (see ANAGALLIS)

DODECATHEON, shooting star

Dodecatheon amethystinum Fassett [G: *D. pulchellum* (Raf.) Merr.] (Iltis and Shaughnessy, 1960), p. 1166
- **f. amethystinum**
- **f. margaritaceum** Fassett

***D. frenchii** (Vasey) Rydb., French's shooting star (Nelson, 1979b)

D. meadia L., shooting star, bird's bill, prairie rooster bill, American cowslip, p. 1165
- **var. brachycarpum** (Small) Fassett
  - **f. brachycarpum**
  - **f. pallidum** Fassett
- **var. meadia**
  - **f. album** J. F. Macbr.
  - **f. meadia**
  - **f. sedens** Fassett

HOTTONIA

Hottonia inflata Elliott, water violet, featherfoil, p. 1172

LYSIMACHIA, loosestrife

Lysimachia ciliata L., fringed loosestrife, p. 1170

L. hybrida Michaux, p. 1170

L. lanceolata Walter, p. 1170

♦**L. nummularia** L., moneywort, p. 1169

L. quadriflora Sims, p. 1170
- **f. albescens** Steyerm.
- **f. quadriflora**

L. radicans Hook., creeping loosestrife, p. 1169

L. thyrsiflora L., tufted loosestrife, water loosestrife, p. 1169

SAMOLUS, water pimpernel

Samolus parviflorus Raf., water pimpernel, brookweed [**M:** *S. valerandii* L.] (the status of this taxon requires further study; see Channell and Wood (1959) for discussion), p. 1172

PYROLACEAE (see MONOTROPACEAE)

RANUNCULACEAE, buttercup family

ACTAEA, baneberry

Actaea pachypoda Elliott, white baneberry, doll's eyes [**G:** *A. alba* Miller] (Keener, 1977), p. 675

ADONIS, adonis, pheasant's eye

♦**Adonis aestivalis** L., summer adonis, p. 699
var. citrina Hoffm.

ANEMONE, anemone

Anemone canadensis L., white anemone, meadow anemone, p. 702
A. caroliniana Walter, prairie anemone, Carolina anemone, p. 700
f. caroliniana
A. cylindrica A. Gray, thimbleweed, candle anemone, p. 700
A. patens L., see excluded taxa
*A. quinquefolia L., wood anemone, windflower (Christ, 1984b)
A. virginiana L., thimbleweed, p. 702
f. leucosepala Fern.
f. plena E. J. Palmer & Steyerm.
f. virginiana

ANEMONELLA

Anemonella thalictroides (L.) Spach, rue anemone [**M:** *Thalictrum thalictroides* (L.) Eames & J. Boivin] (the separation of this genus from *Thalictrum* and *Anemone* is controversial and requires further investigation; see Keener (1976a) and Mitchell and Dean (1982) for conflicting viewpoints), p. 704
- **f. chlorantha** Fassett
- **f. favilliana** Bergseng ex Fassett
- **f. thalictroides**

AQUILEGIA, columbine

Aquilegia canadensis L., columbine, wild honeysuckle, p. 678
- **f. canadensis**
- **f. flaviflora** (Tenney) Britton

CALTHA, marsh marigold

***Caltha palustris** L., marsh marigold, cowslip (Gremaud, 1988)
var. palustris

CIMICIFUGA

Cimicifuga racemosa (L.) Nutt., black cohosh, black snakeroot, p. 674

CLEMATIS

***Clematis catesbyana** Pursh, virgin's bower (Essig, 1990)
C. crispa L., swamp leather flower, blue jasmine, p. 708
C. fremontii S. Watson, Fremont's leather flower [**S:** incl. var. *riehlii* R. O. Erickson] (Keener, 1967), p. 708
C. pitcheri Torrey & A. Gray, leather flower, bluebell, p. 708
var. pitcheri
♦**C. terniflora** DC., virgin's bower [**S:** *C. dioscoreifolia* A. Léveillé & Vaniot var. *dioscoreifolia*] (Hara, 1975; Keener, 1978), p. 706

Clematis versicolor Small, leather flower, p. 706
C. viorna L., leather flower, p. 706
C. virginiana L., virgin's bower [S: incl. f. *missouriensis* (Rydb.) Fern.] (Essig, 1990), p. 705

CONSOLIDA, rocket larkspur [S, G: DELPHINIUM] (Keener, 1976b)

♦**Consolida ambigua** (L.) P. Ball & Heyw., garden larkspur, rocket larkspur [S, G: *Delphinium ajacis* L.] (Keener, 1976b), p. 679
*♦**C. regalis** Gray [*Delphinium consolida* L.] (Chater, 1964; Mühlenbach, 1979)

DELPHINIUM, larkspur (see also CONSOLIDA)

Delphinium carolinianum Walter, Carolina larkspur, wild blue larkspur, prairie larkspur, p. 680
ssp. carolinianum [S: incl. *D. carolinianum* var. *crispum* Perry, var. *nortonianum* (Mackenzie & Bush) Perry] (Warnock, 1981)
ssp. penardii (Huth) M. Warn. [S, G: *D. virescens* Nutt., incl. var. *penardii* (Huth) Perry] (Warnock, 1981)
D. exaltatum Aiton, tall larkspur, p. 680
D. treleasei Bush ex Davis, Trelease's larkspur, p. 680
D. tricorne Michaux, dwarf larkspur, p. 679

HEPATICA, hepatica, liverleaf

Hepatica nobilis Schreber, p. 703
var. acuta (Pursh) Steyerm., sharp-lobed hepatica, sharp-lobed liverleaf
f. acuta
f. albiflora (R. Hoffm.) Steyerm.
f. rosea (R. Hoffm.) Steyerm.

(*Hepatica nobilis*, continued)

var. obtusa (Pursh) Steyerm., round-lobed hepatica, round-lobed liverleaf

f. candida (Fern.) Steyerm.

f. obtusa

HYDRASTIS

Hydrastis canadensis L., golden seal, p. 674

ISOPYRUM

Isopyrum biternatum (Raf.) Torrey & A. Gray, false rue anemone, p. 683

MYOSURUS, mousetail

Myosurus minimus L., p. 699

RANUNCULUS, crowfoot, buttercup

Ranunculus abortivus L., small-flowered crowfoot, early wood buttercup, p. 688

var. abortivus

var. indivisus Fern.

♦**R. acris** L., tall buttercup, p. 692

var. acris

♦**R. arvensis** L., p. 698

♦**R. bulbosus** L., bulbous buttercup, p. 693

ssp. bulbosus

R. cymbalaria Pursh, seaside crowfoot, shore buttercup [S: incl. f. *hebecaulis* Fern.] (the validity of this morph, not accepted by the last monographer of the genus (Benson, 1948), has not been examined critically), p. 687

R. fascicularis Muhlenb. ex Bigelow, early buttercup, prairie buttercup [S: incl. var. *apricus* (E. Greene) Fern.] (Duncan, 1980), p. 697

*♦**Ranunculus ficaria** L., lesser celandine (Yatskievych and Figg, 1989)
var. bulbifera Marsden-Jones
R. flabellaris Raf., yellow water crowfoot [S: incl. f. *riparius* Fern.] (Bostrack and Millington, 1962), p. 690
R. harveyi (A. Gray) Britton, Harvey's buttercup, p. 690
f. harveyi
f. pilosus (Benke) E. J. Palmer & Steyerm.
R. hispidus Michaux, hispid buttercup, swamp buttercup, p. 696
var. caricetorum (E. Greene) T. Duncan [S, M: *R. septentrionalis* Poiret var. *caricetorum* (E. Greene) Fern.] (Duncan, 1980)
var. hispidus [S: incl. var. *marilandicus* (Poiret) L. Benson] (Duncan, 1980)
var. nitidus (Elliott) T. Duncan [S: *R. septentrionalis*, incl. var. *pterocarpus* L. Benson; M: *R. septentrionalis* var. *septentrionalis*] (Duncan, 1980)
R. laxicaulis (Torrey & A. Gray) Darby, water plantain, spearwort, p. 687
R. longirostris Godron, white water crowfoot, p. 687
R. micranthus Nutt. ex Torrey & A. Gray, p. 688
var. delitescens (E. Greene) Fern. [M: *R. micranthus*] (the validity of this taxon requires further study; see S: for discussion)
var. micranthus
♦**R. parviflorus** L., small-flowered crowfoot, p. 698
R. pusillus Poiret, low spearwort, p. 687
R. recurvatus Poiret, hooked crowfoot, p. 692
f. recurvatus
♦**R. repens** L., creeping buttercup, p. 693
var. degeneratus Schur [S, M: var. *pleniflorus* Fern.] (Mitchell and Dean, 1982)
var. repens
♦**R. sardous** Crantz, p. 698
R. sceleratus L., cursed crowfoot, p. 692
var. sceleratus [incl. f. *natans* Glück] (Doolen, 1984; Mitchell and Dean, 1982)

THALICTRUM, meadow rue

Thalictrum dasycarpum Fischer & Avé-Lall., purple meadow rue, p. 676
var. dasycarpum
var. hypoglaucum (Rydb.) J. Boivin [**G:** *T. dasycarpum*] (the validity of this taxon has not been studied critically; see Keener, 1976a)
T. dioicum L., early meadow rue, quicksilver weed, p. 675
T. revolutum DC., wax-leaved meadow rue, waxy meadow rue, p. 676
f. glabrum Pennell
f. revolutum

TRAUTVETTERIA

Trautvetteria caroliniensis (Walter) Vail, false bugbane, p. 676

RESEDACEAE, mignonette family

RESEDA, mignonette

*♦**Reseda lutea** L., wild mignonette, reseda (Mühlenbach, 1983)
ssp. lutea
var. lutea
♦**R. luteola** L., Dyer's rocket, yellow weed, p. 770
ssp. luteola

RHAMNACEAE, buckthorn family

BERCHEMIA

Berchemia scandens (Hill) K. Koch, supple-jack, rattan vine, p. 1027

CEANOTHUS

Ceanothus americanus L., New Jersey tea, wild snowball, p. 1030
var. intermedius (Pursh) Torrey & A. Gray
var. pitcheri Torrey & A. Gray
C. herbaceus Raf., redroot, inland New Jersey tea [**S:** *C. ovatus* Desf.] (Brizicky 1964a, b), p. 1030
var. ovatus
var. pubescens (Torrey & A. Gray) Shinn. [**S:** *C. ovatus* var. *pubescens* Torrey & A. Gray] (Brizicky, 1964a) (note that there is disagreement on whether to recognize this variant as a variety or a forma; see **S:** for brief discussion)

RHAMNUS, buckthorn

Rhamnus caroliniana Walter, Carolina buckthorn, Indian cherry, p. 1028
var. caroliniana
var. mollis Fern. [**M:** *R. caroliniana*] (there is disagreement on the status of this variant; see **S:** and Brizicky (1964a) for discussion)
♦**R. cathartica** L., common buckthorn, p. 1027
R. lanceolata Pursh, p. 1027
var. glabrata Gleason [**M:** *R. lanceolata*] (there is disagreement on the status of this variant; see Brizicky (1964a) and Johnston (1975) for discussion)
var. lanceolata

ROSACEAE, rose family

AGRIMONIA, agrimony

Agrimonia gryposepala Wallr., tall agrimony, hooked agrimony, p. 844
A. parviflora Sol., swamp agrimony, many-flowered agrimony, p. 844

Agrimonia pubescens Wallr., downy agrimony, soft agrimony, p. 846
A. rostellata Wallr., woodland agrimony, p. 844

AMELANCHIER, shadbush, service berry

Amelanchier arborea (Michaux f.) Fern., shadbush, service berry, sarviss berry, sarviss tree, June berry, shadblow, sugar plum, p. 800
♦**A. humilis** Wieg., low shadbush, low service berry, p. 800

ARONIA, chokeberry
[S: PYRUS] (Hardin, 1973; Voss, 1985b)

Aronia melanocarpa (Michaux) Elliott, black chokeberry [S: *Pyrus melanocarpa* (Michaux) Willd.] (Hardin, 1973; Voss, 1985b), p. 800

ARUNCUS, goat's beard

Aruncus dioicus (Walter) Fern., goat's beard, p. 795
var. pubescens (Rydb.) Fern. [M: *A. dioicus*] (the validity of this variety has not been examined critically; see Robertson, 1974)

CRATAEGUS, hawthorn

(Note that there is widespread disagreement on the number of recognizable species in this large and difficult genus; various treatments have accepted between 17 and 50 species for Missouri, but a thorough nomenclatural revision is beyond the scope of the present work; in some cases, we have followed the work of Kruschke (1965) as to nomenclature, although that work may have provided few justifications for changes; discussion in this genus attributed to S: refers to the treatment authored by E. J. Palmer, while the treatment in G: was contributed by R. L. McGregor.)

Crataegus acutifolia Sarg., p. 811
var. acutifolia (the validity of this taxon has not been examined critically, although the species appears to fall within the range of variation for *C. crus-galli* in Missouri))
C. arborea Beadle [**S:** *C. pyracanthoides* Beadle var. *arborea* (Beadle) E. J. Palmer] (Kruschke, 1965) (the affinities of this taxon are obscure; it should probably be combined with the widespread *C. tenax* Ashe), p. 811
C. atrorubens Ashe, p. 808
C. biltmoreana Beadle [**M:** *C. holmesiana* Ashe] (Kruschke (1965) discussed the possible misdetermination of materials from Illinois attributed to this taxon; the use of *C. holmesiana* in **M:** reflects redetermination of these collections, rather than nomenclatural synonymy; the two taxa are in different series in the genus), p. 805
C. calpodendron (Ehrh.) Medikus, urn-tree hawthorn, pear hawthorn (the following poorly defined varieties have not been examined critically; they were accepted by **S:**, but not by **G:** or **M:** var. *globosa* (Sarg.) E. J. Palmer, var. *hispidula* (Sarg.) E. J. Palmer, var. *microcarpa* (Chapman) E. J. Palmer, var. *mollicula* (Sarg.) E. J. Palmer), p. 821
C. coccinioides Ashe, Kansas hawthorn, p. 820
C. collina Chapman [**G:** *C. punctata* Jacq.] (the validity of this taxon has not been examined critically; also, the following poorly defined varieties have not been examined critically; they were accepted by **S:**, but not by **G:** var. *collicola* (Ashe) E. J. Palmer, var. *secta* (Sarg.) E. J. Palmer, var. *sordida* (Sarg.) E. J. Palmer, var. *succincta* (Sarg.) E. J. Palmer), p. 814
C. x *conspecta* Sarg., see named hybrids
C. crus-galli L., cockspur thorn, p. 810
var. capillata Sarg. [**S:** *C. crus-galli* var. *bellica* (Sarg.) E. J. Palmer] (Kruschke, 1965)
var. crus-galli [**S:** incl. var. *barrettiana* (Sarg.) E. J. Palmer, var. *crus-galli* f. *truncata* (Sarg.) E. J. Palmer, var. *exigua* (Sarg.) Eggl., var. *pyracanthifolia* Aiton, *C. engelmannii* f. *nuda* E. J. Palmer; **M:** incl. var. *barrettiana*] (Kruschke, 1965) (note that the validity of the following three varieties has not been examined, but

(*Crataegus crus-galli*, continued)
they appear no more distinct than those combined above: var. *leptophylla* (Sarg.) E. J. Palmer, var. *macra* (Beadle) E. J. Palmer, var. *pachyphylla* (Sarg.) E. J. Palmer)

C. x *danielsii* E. J. Palmer, see named hybrids

C. dispessa Ashe, p. 817

C. engelmannii Sarg., barberry-leaved hawthorn [**S:** incl. var. *sinistra* (Beadle) E. J. Palmer; **G:** *C. crus-galli*] (Kruschke, 1965) (Gleason and Cronquist (1963) and Little (1979) have suggested that *C. berberifolia* Torrey & A. Gray is an older name for this species; the situation requires further study), p. 812

C. fecunda Sarg., p. 812

C. gattingeri Ashe [**M:** *C. pruinosa*] (the validity of this taxon has not been studied critically), p. 818

C. hannibalensis E. J. Palmer [**G:** *C. crus-galli*] (the validity of this taxon has not been examined critically, although it and *C. vallicola* appear to fall within the range of variation for *C. palmeri* in Missouri), p. 812

C. harveyana Sarg., p. 805

C. x *incaedua* Sarg., see named hybrids

C. intricata Lange, thicket hawthorn, p. 805

var. neobushii (Sarg.) Kruschke [**S:** *C. neobushii* Sarg., *C. padifolia* Sarg., incl. var. *incarnata*; **M:** *C. neobushii*] (Kruschke, 1965) (note that variation in this taxon is very complex, and it is possible that *C. padifolia* may eventually require recognition again as a separate taxon), p. 805

C. x *kelloggii* Sarg., see named hybrids

C. lanuginosa Sarg., woolly hawthorn, p. 817

C. x *latebrosa* Sarg., see named hybrids

C. x *lettermanii* Sarg., see named hybrids

C. macracantha G. Lodd. ex Loudon, p. 821

var. pertomentosa (Ashe) Kruschke [**S, G:** *C. succulenta* Link var. *pertomentosa* (Ashe) E. J. Palmer; **M:** *C. calpodendron* (Ehrh.) Medikus] (Kruschke, 1965)

C. margaretta Ashe, p. 808

var. brownii (Britton) Sarg.

var. margaretta

Crataegus marshallii Eggl., parsley haw, p. 804
C. mollis (Torrey & A. Gray) Scheele, downy hawthorn, summer haw, turkey apple, p. 816
var. dumetosa (Sarg.) Kruschke [**S:** *C. mollis* f. *dumetosa* (Sarg.) E. J. Palmer] (Kruschke, 1965)
var. mollis
C. x *nitida* (Engelm.) Sarg., see named hybrids
C. noelensis Sarg., p. 816
C. x *nuda* Sarg., see named hybrids
C. palmeri Sarg., p. 812
C. permixta E. J. Palmer (this taxon appears to be merely a slightly villous form of *C. fecunda*), p. 812
C. phaenopyrum (L. f.) Medikus, Washington thorn, p. 804
C. platycarpa Sarg., p. 818
C. pruinosa (Wendl. f.) K. Koch, frosty hawthorn, p. 818
var. brachypoda (Sarg.) E. J. Palmer [**S:** incl. *C. disjuncta* Sarg.] (Kruschke (1965) suggested that this variety might better be placed in synonymy with *C. dissona* Sarg. var. *dissona*; this varietal name has priority over var. *brachypoda* if *C. pruinosa* and *C. dissona* are combined; the situation requires further study)
var. leiophylla (Sarg.) J. Phipps [**S:** *C. rugosa* Ashe] (Kruschke, 1965; Phipps and Muniyamma, 1980) (this appears to represent the same taxon as *C. pruinosa* var. *rugosa* (Ashe) Kruschke, although neither of the two works cited contain complete synonymy; the epithet *rugosa* is apparently illegitimate)
var. pruinosa
var. virella (Ashe) Kruschke [**S:** *C. mackenzii* Sarg., incl. var. *aspera* (Sarg.) E. J. Palmer, var. *bracteata* (Sarg.) E. J. Palmer] (Kruschke, 1965; Phipps and Muniyamma, 1980)
C. regalis Beadle (the validity of this taxon, including the varietal names, has not been examined critically), p. 811
var. paradoxa (Sarg.) E. J. Palmer [**G:** *C. crus-galli*]
var. regalis
C. reverchonii Sarg., p. 811
var. discolor (Sarg.) E. J. Palmer [**G:** *C. crus-galli*] (the validity of this taxon has not been examined critically)

Crataegus sicca Sarg., p. 808
var. glabrifolia (Sarg.) E. J. Palmer
var. sicca
C. x *simulata* Sarg., see named hybrids
C. spathulata Michaux, littlehip hawthorn, p. 804
C. succulenta Schrader ex Link, red haw, fleshy hawthorn, p. 821
var. neofluvialis (Ashe) E. J. Palmer (Ashe's (1900) description of this taxon listed stamens as 10-15 (typical of *C. macracantha*), but Kruschke (1965) stated that all original specimens located had 14-20 (typical of *C. succulenta*); **S:** assigned to this taxon plants with stamens "10 or rarely more"; thus the nomenclatural status of these plants is presently uncertain)
var. succulenta
C. tantula Sarg. [**G:** *C. crus-galli*] (the validity of this taxon has not been examined critically, although the species appears to fall within the range of variation for *C. crus-galli* in Missouri), p. 811
C. uniflora Muenchh., dwarf hawthorn, oneflower hawthorn, p. 804
C. x *vailiae* Britton, see named hybrids
C. vallicola Sarg. [**G:** *C. crus-galli*] (the validity of this taxon has not been examined critically, although it and *C. hannibalensis* appear to fall within the range of variation for *C. palmeri* in Missouri), p. 812
C. verruculosa Sarg., p. 815
C. viridis L., green haw, p. 806
var. lanceolata (Sarg.) E. J. Palmer [**G, M:** *C. viridis*] (the validity of this taxon has not been studied critically)
var. lutensis (Sarg.) E. J. Palmer [**G:** *C. viridis*] (the validity of this taxon has not been studied critically; note also that this epithet was misspelled "lutescens" by **S:** due to a printing error, and this has been propagated in much of the more recent literature)
var. ovata (Sarg.) E. J. Palmer [**G:** *C. viridis*] (the validity of this taxon has not been studied critically)
var. viridis

DUCHESNEA

♦**Duchesnea indica** (Andrews) Focke, Indian strawberry, p. 824

S: Steyermark **G:** Great Plains Flora **M:** Mohlenbrock

FILIPENDULA

Filipendula rubra (Hill) Robinson, queen of the prairie, p. 831

FRAGARIA, strawberry

♦*Fragaria* x *ananassa* Duchesne, see named hybrids
F. vesca L., woodland strawberry, wild strawberry, p. 823
var. americana Porter [**M:** *F. americana* (Porter) Britton] (Staudt's (see Staudt, 1962) monograph of North American *Fragaria* was never published, thus no evidence exists presently for the recognition of the taxon *americana* as a species or subspecies; see also Robertson, 1974)
F. virginiana Duchesne, wild strawberry [**S:** incl. var. *illinoensis* (Prince) A. Gray] (**G:** noted that the varieties of *F. virginica* are indistinguishable as presently defined; Robertson (1974) suggested that the situation requires further study), p. 823

GEUM, avens

Geum canadense Jacq., white avens, red root [**S:** incl. var. *camporum* (Rydb.) Fern. & Weath.] (Robertson, 1974), p. 832
G. laciniatum Murray, rough avens, p. 832
var. trichocarpum Fern. [**G:** *G. laciniatum*] (Robertson, 1974)
G. vernum (Raf.) Torrey & A. Gray, spring avens, early water avens, p. 831
***G. virginianum** L., pale avens (Solecki, 1983)

GILLENIA, Indian physic

Gillenia stipulata (Muhlenb. ex Willd.) Baillon, Indian physic, American ipecac [**G, M:** *Porteranthus stipulatus* (Muhlenb. ex Willd.) Britton] (Hunt, 1982; Voss, 1986), p. 795

G. trifoliata (L.) Moench, Indian physic, Bowman's root [**M:** *Porteranthus trifoliatus* (L.) Britton] (Hunt, 1982; Voss, 1986), p. 796

MALUS, apple
[S, G: PYRUS] (Williams, 1982; Voss, 1985b)

Malus angustifolia (Aiton) Michaux, wild crab, narrow-leaved crab apple [**S:** *Pyrus angustifolia* Aiton var. *spinosa* (Rehder) L. Bailey] (Williams, 1982; Voss, 1985b) (note that the validity of var. *spinosa* has not been examined critically), p. 798

*♦**M. baccata** (L.) Borkh., Siberian crab (Mühlenbach, 1979; Williams, 1982; Voss, 1985b)

M. coronaria (L.) Miller, wild crab, sweet crab apple [**S:** *Pyrus coronaria* L., incl. var. *lancifolia* (Rehder) Fern.] (Williams, 1982; Voss, 1985b) (note that the validity of var. *lancifolia* has not been examined critically), p. 799

M. ioensis (Alph. Wood) Britton, prairie crab apple, wild crab [**S, G:** *Pyrus ioensis* (Alph. Wood) L. Bailey] (Williams, 1982; Voss, 1985b), p. 799

M. pumila Miller, apple [**S:** *Pyrus malus* L.] (Williams, 1982; Voss, 1985b), p. 798

♦*M.* x *soulardii* (L. Bailey) Britton, see named hybrids

NEVIUSIA

Neviusia alabamensis A. Gray, snow wreath, p. 843

PHYSOCARPUS, ninebark

Physocarpus opulifolius (L.) Maxim., ninebark, p. 793
var. intermedius (Rydb.) Robinson [**M:** *P. opulifolius*] (Robertson, 1974)

POTENTILLA, cinquefoil

***♦Potentilla argentea** L., silvery cinquefoil (Mühlenbach, 1979)
P. arguta Pursh, tall cinquefoil, prairie cinquefoil, p. 830
P. canadensis L., Canada cinquefoil, five finger, p. 828
var. villosissima Fern.
P. nicolletii (S. Watson) E. Sheldon [**G:** *P. paradoxa*] (the validity of this weak segregate of *P. paradoxa* has not been examined critically), p. 830
P. norvegica L., rough cinquefoil, Norwegian cinquefoil, p. 828
P. paradoxa Nutt. ex Torrey & A. Gray, bushy cinquefoil, p. 830
♦P. recta L., rough-fruited cinquefoil, sulphur cinquefoil, p. 830
P. rivalis Nutt. ex Torrey & A. Gray, brook cinquefoil, p. 828
var. millegrana (Engelm. ex Lehm.) S. Watson [**G:** *P. rivalis*; **M:** *P. millegrana* Engelm. ex Lehm.] (the validity of this taxon has not been evaluated critically; see Robertson, 1974)
var. pentandra (Engelm.) S. Watson [**G:** *P. rivalis*] (the validity of this taxon has not been evaluated critically; see Robertson, 1974)
var. rivalis
P. simplex Michaux, common cinquefoil, old-field cinquefoil, five finger, p. 827
var. argyrisma Fern. [**G:** *P. simplex*] (Robertson, 1974)
var. calvescens Fern. [**G:** *P. simplex*] (Robertson, 1974)
var. simplex

PRUNUS, cherry, plum, peach, apricot

Prunus americana Marshall, wild plum, p. 860
P. angustifolia Marshall, Chickasaw plum, p. 861
***♦P. armeniaca** L., apricot (Mühlenberg, 1979)

♦**Prunus cerasus** L., sour cherry, p. 861
P. hortulana L. Bailey, wild goose plum, hortulan plum, p. 860
♦**P. mahaleb** L., perfumed cherry, p. 861
P. mexicana S. Watson, big tree plum, wild plum [**M:** incl. *P. americana* var. *lanata* Sudw.] (Shinners, 1956b), p. 858
P. munsoniana Wight & Hedr., wild goose plum, p. 860
♦**P. persica** (L.) Batsch, peach, p. 861
var. persica
P. serotina Ehrh., black cherry, wild cherry, rum cherry, p. 862
ssp. serotina
♦**P. spinosa** L., blackthorn, sloe, p. 858
P. virginiana L., choke cherry, p. 862
var. virginiana
f. deamii G. Jones (note that **G:** suggests that this forma may not be distinct from f. *virginiana*; the situation requires further study)
f. virginiana

PYRUS, pear
(see also ARONIA, MALUS)

♦**Pyrus communis** L., pear, p. 798

ROSA, rose

Rosa arkansana Porter, prairie wild rose, p. 855
var. suffulta (E. Greene) Cockerell [**M:** *R. suffulta* E. Greene] (the validity of this taxon, often recognized as a separate species, has not been studied critically)
R. blanda Aiton, smooth wild rose, meadow rose, p. 855
f. blanda
♦**R. canina** L., dog rose, dog briar, p. 851
var. canina
var. dumetorum Baker (note that this taxon is often elevated to specific rank under the name *R. corymbifera* Borkh.)
R. carolina L., pasture rose [**S:** incl. var. *carolina* f. *glandulosa* (Crepin) Fern., var. *grandiflora* (Baker) Rehder, var. *villosa* (Best) Rehder; **M:** incl. var. *villosa* (Best) Rehder] (Lewis, 1957), p. 852

♦*Rosa* x *centifolia* L., see named hybrids
♦*R.* x *damascena* Miller, see named hybrids
♦**R. eglanteria** L., sweetbrier, eglantine rose, p. 851
♦**R. gallica** L., French rose [S: incl. var. *officinalis* Thory] (this variant, the apothecary's rose, is usually considered a cultivar; see Krüssman, 1981), p. 850
♦**R. micrantha** Borrer ex Smith, small-flowered sweetbrier, p. 851
♦**R. multiflora** Thunb. ex Murray, multiflora rose, Japanese rose, p. 849
R. palustris Marshall, swamp rose, p. 852
f. palustris
♦**R. rugosa** Thunb., Japanese rose, rugosa rose, p. 854
R. setigera Michaux, prairie rose, climbing rose, p. 849
var. setigera
f. inermis E. J. Palmer & Steyerm.
f. setigera
var. tomentosa Torrey & A. Gray [G: *R. setigera*] (Lewis, 1958)
f. alba Steyerm.
f. serena (E. J. Palmer & Steyerm.) Fern.
f. tomentosa
♦**R. spinosissima** L., Scotch rose, p. 855
var. spinosissima
R. virginiana Miller, p. 854
f. virginiana

RUBUS, raspberry, blackberry, bramble

Rubus allegheniensis Porter, highbush blackberry, common blackberry [S: incl. var. *plausus* L. Bailey] (Davis et al., 1969a), p. 840
var. allegheniensis
R. argutus Link, highbush blackberry [G: *R. ostryifolius* Rydb.] (Hogdon and Steele, 1966), p. 841
R. bifrons Vest ex Tratt., p. 836

♦**Rubus discolor** Weihe & Nees, Himalaya berry [**S:** *R. procerus* Muller] (the taxonomy and nomenclature of this commonly cultivated complex of taxa is poorly understood, due to difficulties in establishing the parentage of the several hybrid entities; nomenclature here follows that of *Flora Europaea* (Heslop-Harrison, 1968) for the sake of convenience), p. 836

R. enslenii Tratt., southern dewberry, p. 838

R. flagellaris Willd., dewberry, northern dewberry, p. 837

var. flagellaris

var. occidualis L. Bailey [**G:** *R. flagellaris*; **M:** *R. roribaccus* (L. Bailey) Rydb.] (this taxon has not been evaluated critically; see **S:** for a discussion of some points relating to this problem)

f. occidualis

f. roseus Steyerm.

f. roseoplenus (E. J. Palmer & Steyerm.) Steyerm.

R. frondosus Bigelow, highbush blackberry [**S, G:** *R. pensilvanicus*] (Hodgdon and Steele, 1966; Davis et al., 1969b) (note that there is considerable confusion concerning the distinctness of this taxon from *R. pensilvanicus* and the matter requires further study), p. 841

R. invisus (L. Bailey) Britton, dewberry, p. 838

♦**R. laciniatus** Willd., cut-leaved blackberry, p. 836

R. missouricus L. Bailey, prickly groundberry, p. 840

R. mollior L. Bailey, highbush blackberry [**G:** *R. pensilvanicus*] (Davis et al., 1969b) (the relationships between this taxon, *R. argutus*, and *R. pensilvanicus* have not been well studied), p. 841

R. occidentalis L., black raspberry, p. 835

f. occidentalis

R. orarius Blanchard, highbush blackberry (note that this is a name of uncertain application; some authors use it to refer to glandular plants related to *R. allegheniensis*, while others use it to refer to glandless plants related to *R. pensilvanicus*; see Davis et al. (1969b) and Voss (1985b) for a brief discussion), p. 841

Rubus ostryifolius Rydb., highbush blackberry [**M:** *R. argutus*] (the distinctions between this taxon, *R. argutus*, and *R. pensilvanicus* have not been studied critically and there is some confusion concerning proper application of this name; see Davis et al., 1969b), p. 842

R. pensilvanicus Poiret, highbush blackberry, p. 841

f. albinus E. J. Palmer & Steyerm.

f. pensilvanicus

R. strigosus Michaux, red raspberry [**S:** *R. idaeus* L. var. *strigosus* (Michaux) Maxim.; **G:** *R. idaeus* ssp. *sachalinensis* (A. Léveillé) Focke var. *sachalinensis*] (Bailey, 1945; Voss, 1985b) (the relationship between this taxon and the European plants known as *R. idaeus* requires further study), p. 835

f. strigosus

R. trivialis Michaux, southern dewberry, p. 837

SPIRAEA, spiraea

Spiraea alba Duroi, meadowsweet p. 794

var. alba

♦**S. douglasii** Hook., p. 795

var. douglasii

♦**S. prunifolia** Siebold & Zucc., bridal wreath, p. 794

f. prunifolia [**S:** *S. prunifolia* var. *plena* Schneider] (Nakai, 1915)

S. tomentosa L., hardhack, steeple bush [**S:** incl. var. *rosea* (Raf.) Fern.] (Robertson, 1974), p. 795

*♦*S.* x *vanhouttei* (Briot) Zabel, see named hybrids

WALDSTEINIA

Waldsteinia fragarioides (Michaux) Tratt., barren strawberry, p. 824

ssp. fragarioides

S: Steyermark **G:** Great Plains Flora **M:** Mohlenbrock

RUBIACEAE, madder family

CEPHALANTHUS, buttonbush

Cephalanthus occidentalis L., buttonbush, globe flower, honeyball, pond dogwood [**S, M:** incl. var. *pubescens* Raf.] (Wells and Sharp, 1966; Rogers, 1987), p. 1398

DIODIA, buttonweed

Diodia teres Walter, rough buttonweed, p. 1396
D. virginiana L., large buttonweed, p. 1396
f. hirsuta (Pursh) Fern.
f. virginiana

GALIUM, bedstraw

Galium aparine L., cleavers, goose grass, catchweed bedstraw (note that Moore (1975) suggested the possibility that the morphologically similar *G. spurium* L. might occur in Missouri, but this has not been verified), p. 1389
f. aparine
G. arkansanum A. Gray, p. 1392
G. boreale L., northern bedstraw, p. 1392
ssp. septentrionale (Roemer & Schultes) Hara [**S:** incl. var. *hyssopifolium* (Hoffm.) DC.] (Hara, 1956; Iltis, 1957; Urban and Iltis, 1957)
G. circaezans Michaux, wild licorice, woods bedstraw, p. 1390
var. circaezans
var. hypomalacum Fern. [**M:** *G. circaezans*] (Lawson, 1973)
G. concinnum Torrey & A. Gray, shining bedstraw, p. 1395
***♦G. divaricatum** Pourret ex Lam. (Castaner, 1982a, 1983b)
G. obtusum Bigelow, bluntleaf bedstraw, wild madder, p. 1394
ssp. obtusum
***♦G. pedemontanum** (Bellardi) All. (Sanders, 1976)
G. pilosum Aiton, hairy bedstraw, p. 1390
var. pilosum
var. puncticulosum (Michaux) Torrey & A. Gray

Galium tinctorium L., stiff bedstraw (note that Puff (1976) discussed var. *floridanum* (Wieg.) Puff and included Missouri in its distributional range; concurrent studies by Lawson (1976) suggested that infraspecific variants of *G. tinctorium* are unworthy of taxonomic recognition), p. 1394

G. triflorum Michaux, sweet-scented bedstraw, fragrant bedstraw, p. 1389

♦**G. verum** L., yellow bedstraw, Our Lady's bedstraw, p. 1394

G. virgatum Nutt., dwarf bedstraw, southwestern bedstraw, p. 1389

HEDYOTIS, bluets
[S: incl. HOUSTONIA, OLDENLANDIA]
(Lewis, 1961; Rogers, 1987)

Hedyotis boscii DC. [S: *Oldenlandia boscii* (DC.) Chapman] (Shinners, 1949; Lewis, 1961), p. 1404

H. caerulea (L.) Hook., bluets, innocence, Quaker ladies [S: *Houstonia caerulea* L.] (Fosberg, 1954), p. 1399

var. caerulea

f. caerulea

H. crassifolia Raf., small bluets, star violet [S: *Houstonia minima* Beck, *Houstonia pusilla* Schoepf, incl. f. *albiflora* Standley, f. *rosea* Steyerm.; M: incl. *Hedyotis pusilla* (Schoepf) Mohl.] (Lewis and Moore, 1958) (note that the relationship between the taxa *minima* and *pusilla* is not well understood and requires further study), p. 1399, 1400

H. longifolia (Gaertner) Hook., long-leaved bluets, slender-leaved bluets [S: *Houstonia longifolia* Gaertner] (Lewis, 1961; Smith, 1976b), p. 1402

var. longifolia

var. tenuifolia (Nutt.) Torrey & A. Gray [S: *Houstonia longifolia* var. *tenuifolia* (Nutt.) Alph. Wood; M: *Hedyotis nuttalliana* Fosb.] (Smith, 1976b; see also S: for discussion)

H. nigricans (Lam.) Fosb., narrow-leaved bluets [S: *Houstonia nigricans* (Lam.) Fern.] (Shinners, 1949; Lewis, 1961), p. 1404

Hedyotis purpurea (L.) Torrey & A. Gray, mountain houstonia, broad-leaved bluets [S: *Houstonia purpurea* L.] (Shinners, 1949; Lewis, 1961), p. 1400
var. calycosa (A. Gray) Fosb. [S: *Houstonia purpurea* var. *calycosa* A. Gray] (Terrell, 1959; Lewis, 1961)
var. purpurea
H. uniflora (L.) Lam. [S: *Oldenlandia uniflora* L.] (Fosberg, 1954; Lewis, 1961), p. 1404

HOUSTONIA (see HEDYOTIS)

MITCHELLA, partridge berry

Mitchella repens L., partridge berry, twin berry, p. 1396
f. repens

OLDENLANDIA (see HEDYOTIS)

SHERARDIA

♦**Sherardia arvensis** L., field madder, p. 1388

SPERMACOCE, buttonweed

Spermacoce glabra Michaux, smooth buttonweed, p. 1395

RUTACEAE, citrus family

PTELEA, hop tree

Ptelea trifoliata L., common hop tree, stinking ash, p. 968
ssp. trifoliata
var. mollis Torrey & A. Gray
var. trifoliata

RUTA, rue

♦**Ruta graveolens** L., common rue, p. 968

ZANTHOXYLUM, prickly ash

Zanthoxylum americanum Miller, common prickly ash, northern prickly ash, toothache tree, p. 966
f. americanum

SALICACEAE, willow family

POPULUS, poplar

♦**Populus alba** L., silver poplar, white poplar, p. 504
var. alba
♦*P.* x *canadensis* Moench, see named hybrids
P. deltoides Bartram ex Marshall, cottonwood, eastern cottonwood, southern cottonwood, p. 507
***ssp. monilifera** (Aiton) Eckenwalder (Eckenwalder, 1977a)
ssp. deltoides [**S:** *P. deltoides* var. *deltoides*, incl. f. *pilosa* (Sarg.) Sudw.; var. *missouriensis* (A. Henry) Rehder; **M:** *P. deltoides*] (Eckenwalder, 1977a, b)
P. grandidentata Michaux, large-toothed aspen, p. 504
P. heterophylla L., swamp cottonwood, 506
♦*P.* x *jackii* Sarg., see named hybrids
♦**P. nigra** L., black poplar, p. 507
var. italica Muenchh. Lombardy poplar
♦**P. tremula** L., European aspen, p. 506
P. tremuloides Michaux, quaking aspen, trembling aspen, p. 506

SALIX, willow

♦**Salix alba** L., white willow, p. 496
var. alba
var. caerulea (Smith) Smith [**S, M:** *S. alba* var. *calva* G. Meyer] (Argus, 1986)
var. vitellina (L.) Stokes (note that several authors, including Argus (1986), have suggested that this taxon should be treated as a cultivar, rather than as a variety, because it is a nonreproductive, pistillate clone)
S. amygdaloides Andersson, peach-leaved willow, p. 494
♦**S. babylonica** L., weeping willow, p. 496
S. x *bebbii* Gand., see named hybrids
S. caroliniana Michaux, Carolina willow, Ward's willow, p. 494
S. discolor Muhlenb., pussy willow, p. 500
S. eriocephala Michaux, diamond willow, Missouri willow [**S:** incl. *S. rigida* var. *angustata* (Pursh) Fern., var. *rigida* f. *mollis* (E. J. Palmer & Steyerm.) Fern., var. *rigida* f. *rigida*, var. *rigida* f. *subintegra* (E. J. Palmer & Steyerm.) Steyerm.; **M:** incl. *S. rigida*] (Argus, 1986), p. 498
S. exigua Nutt., sandbar willow, coyote willow [**S:** *S. interior* Rowlee, incl. f. *wheeleri* (Rowlee) Roul.; **G:** incl. ssp. *interior* (Rowlee) Cronq.] (Argus, 1986), p. 497
♦**S. fragilis** L., crack willow, p. 496
S. x *glatfelteri* C. Schneider, see named hybrids
S. humilis Marshall, prairie willow, p. 500
var. humilis [**S, M:** incl. var. *hyporhysa* Fern.] (Argus, 1986)
var. microphylla (Andersson) Fern., dwarf gray willow, sage willow
S. nigra Marshall, black willow, p. 494
S. petiolaris Smith [**S:** *S. gracilis* Andersson var. *textoris* Fern.] (Argus, 1964), p. 501
♦**S. purpurea** L., basket willow, purple osier, p. 501
*♦*S.* x *rubens* Schrank, see named hybrids
S. sericea Marshall, silky willow [**S:** incl. f. *glabra* E. J. Palmer & Steyerm.] (Argus, 1986), p. 501

SANTALACEAE, sandalwood family

COMANDRA, bastard toadflax

Comandra umbellata (L.) Nutt., p. 572
ssp. umbellata [S: *C. richardsiana* Fern.] (Piehl, 1965)

SAPINDACEAE, soapberry family

CARDIOSPERMUM, balloon vine, heartseed

♦**Cardiospermum halicacabum** L., common balloon vine, p. 1023

SAPINDUS, soapberry

Sapindus drummondii Hook. & Arn., western soapberry, chinaberry [G: *S. saponaria* L. var. *drummondii* (Hook. & Arn.) L. Benson] (the status of this taxon requires further stuy; the original transfer from specific to varietal status (Benson, 1943a, b) was not adequately justified and most authors (e.g., Little, 1979) continue to treat the western and wing-leaved soapberries as distinct species), p. 1023

SAPOTACEAE, sapodilla family

BUMELIA, buckthorn

Bumelia lanuginosa (Michaux) Pers., woolly buckthorn, chittim wood, false buckthorn, gum-elastic, p. 1172
ssp. oblongifolia (Nutt.) Cronq. [S: *B. lanuginosa* var. *albicans* Sarg.; G, M: *B. lanuginosa* var. *oblongifolia* (Nutt.) R. Clark] (there is no modern monograph of *Bumelia* and the genus is greatly in need of further research; the varieties *albicans* and *oblongifolia*, both placed under ssp. *oblongifolia* by Cronquist (1945b), are said to differ in density of pubescence, a character that

S: Steyermark G: Great Plains Flora M: Mohlenbrock

(*Bumelia lanuginosa*, continued)
appears to vary continuously in the subspecies; accordingly we have not recognized varieties within this subspecies)

B. lycioides (L.) Pers., southern buckthorn, Carolina buckthorn, ironwood, p. 1174

SAURURACEAE, lizard's tail family

SAURURUS, lizard's tail

Saururus cernuus L., p. 488

SAXIFRAGACEAE, saxifrage family
(see also GROSSULARIACEAE, HYDRANGEACEAE)

HEUCHERA, alum root

Heuchera americana L., p. 780
- ***var. americana** (Wells, 1984)
- **var. hirsuticaulis** (Wheelock) C. Rosend., Butters & Lakela [S: incl. var. *interior* C. Rosend., Butters & Lakela; G: *H. hirsuticaulis* (Wheelock) Rydb.] (Wells, 1984)

H. parviflora Bartling, p. 779
- **var. parviflora** [S: *H. missouriensis* C. Rosend.; M: *H. parviflora* var. *rugelii* (Shuttlew. ex Kunze) C. Rosend., Butters, & Lakela] (Wells, 1984)
- **var. puberula** (Mackenzie & Bush) E. Wells [S: *H. puberula* Mackenzie & Bush, incl. f. *glabrata* Steyerm.] (Wells, 1984)

H. richardsonii R. Br. [S: *H. richardsonii* var. *affinis* C. Rosend., Butters & Lakela, var. *grayana* C. Rosend., Butters & Lakela; G: incl. var. *grayana*, var. *hispidior* C. Rosend., Butters & Lakela; M: *H. richardsonii* var. *grayana*] (Wells, 1984), p. 780

Heuchera villosa Michaux, p. 778
var. villosa [S: *H. villosa* var. *macrorhiza* (Small) C. Rosend., Butters & Lakela] (Wells, 1984)

HYDRANGEA (see HYDRANGEACEAE)

ITEA (see GROSSULARIACEAE)

MITELLA, miterwort, bishop's cap

Mitella diphylla L., p. 781
f. diphylla

PARNASSIA, grass-of-Parnassus
[M: PARNASSIACEAE]

Parnassia grandifolia DC., p. 781

PENTHORUM, ditch stonecrop
[G: CRASSULACEAE]

Penthorum sedoides L., p. 774

PHILADELPHUS (see HYDRANGEACEAE)

RIBES (see GROSSULARIACEAE)

SAXIFRAGA, saxifrage

Saxifraga pensylvanica L., p. 775
var. forbesii (Vasey) Engl. & Irmscher, Forbes' saxifrage [M: *S. forbesii* Vasey] (the status of this taxon requires further study; Burns (1942) presented evidence that it should be regarded as a distinct species, based upon morphological, cytological, and phytogeographic studies, but more recently, Phillips and Kowal (1983) questioned whether it should be recognized taxonomically at all, and pointed out that the cytological and morphological

(*Saxifraga pensylvanica*, continued)
situation in this group is considerably more complex than thought by Burns; the paper (abstract) by Phillips and Kowal (1983), which has not been published fully, apparently does not account for all of the morphological differences suggested by Burns (1942), nor does it address differences in habitat requirements; this taxon is here retained at varietal status, until more detailed studies can account for the confusing patterns of variation in the group)

S. texana Buckley, p. 775

S. virginiensis Michaux, early saxifrage, p. 775

f. virginiensis

SULLIVANTIA

Sullivantia sullivantii (Torrey & A. Gray) Britton [**S, M:** *S. renifolia* C. Rosend.] (Soltis, 1980), p. 774

SCROPHULARIACEAE, figwort family

AGALINIS, gerardia
[S: GERARDIA] (Pennell, 1928; Shinners, 1962a)

Agalinis aspera (Douglas ex Benth.) Britton [**S:** *Gerardia aspera* Douglas ex Benth.] (Pennell, 1928, 1929), p. 1358

A. fasciculata (Elliott) Raf. [**S:** *Gerardia fasciculata* Elliott, incl. f. *albiflora* E. J. Palmer] (Pennell, 1928, 1929) (note that f. *albiflora* has not been transferred to *Agalinis*), p. 1360

A. gattingeri (Small) Small, rough-stemmed gerardia [**S:** *Gerardia gattingeri* Small; **G:** *A. skinneriana* (Alph. Wood) Britton] (Pennell, 1928, 1929), p. 1361

A. heterophylla (Nutt.) Small [**S:** *Gerardia heterophylla* Nutt.] (Pennell, 1928, 1929), p. 1358

Agalinis purpurea (L.) Pennell [S: *Gerardia purpurea* L.] (Pennell, 1928, 1929), p. 1358

A. skinneriana (Alph. Wood) Britton, pale gerardia [S: *Gerardia skinneriana* Alph. Wood] (Pennell, 1928, 1929), p. 1361

A. tenuifolia (M. Vahl) Raf., slender gerardia [S: *Gerardia tenuifolia* M. Vahl] (Pennell, 1928, 1929), p. 1360

var. macrophylla (Benth. ex Hook.) S. F. Blake [S: *Gerardia tenuifolia* var. *macrophylla* Benth. ex Hook.; M: *A. besseyana* (Britton) Britton] (Pennell, 1928, 1929)

var. parviflora (Nutt.) Pennell [S: *Gerardia tenuifolia* var. *parviflora* Nutt.] (Pennell, 1928, 1929)

var. tenuifolia

A. viridis (Small) Pennell [S: *Gerardia viridis* Small] (Pennell 1928, 1929), p. 1361

ANTIRRHINUM, snapdragon

♦**Antirrhinum majus** L., snapdragon, common snapdragon, p. 1351

ssp. majus

AUREOLARIA, false foxglove [S: GERARDIA] (Pennell, 1928; Shinners, 1962a)

Aureolaria flava (L.) Farw., smooth false foxglove [S: *Gerardia flava* L., incl. var. *calycosa* (Mackenzie & Bush) Steyerm.] (Pennell, 1928) (note that var. *calycosa* may be a distinct taxon, but no combination presently exists for this variety under *Aureolaria flava*), p. 1362

A. grandiflora (Benth.) Pennell, big-flowered gerardia [S: *Gerardia grandiflora* Benth.] (Pennell, 1928), p. 1362

var. pulchra Pennell [S: *Gerardia grandiflora* var. *pulchra* (Pennell) Fern.] (Pennell, 1928)

var. serrata (Torrey ex Benth.) Pennell [S: *Gerardia grandiflora* var. *cinerea* (Pennell) Cory] (Pennell, 1928)

A. pectinata (Nutt.) Pennell [S: *Gerardia pedicularia* L. var. *pectinata* Nutt.] (Pennell, 1928) (the relationship between *A. pectinata* and *A. pedicularia* has not been studied critically), p. 1364

BACOPA, water hyssop
(see also MECARDONIA)

Bacopa rotundifolia (Michaux) Wettst., p. 1332

BUCHNERA

Buchnera americana L., blue hearts, p. 1366

CASTILLEJA, painted cup, paint brush

Castilleja coccinea (L.) Sprengel, Indian paintbrush, painted cup, Indian blanket, p. 1367
- **f. coccinea**
- **f. lutescens** Farw.

C. purpurea (Nutt.) Don, p. 1368
- **var. purpurea**

C. sessiliflora Pursh, downy painted cup, p. 1368

CHAENORRHINUM

♦**Chaenorrhinum minus** (L.) Lange, dwarf snapdragon, p. 1351
- **ssp. minus**

CHELONE, turtlehead

Chelone glabra L., white turtlehead [S: incl. var. *linifolia* N. Coleman] (Crosswhite, 1965; Smith, 1988), p. 1340
- **f. glabra**
- **f. tomentosa** (Raf.) Pennell [M: *C. glabra*] (the validity of this taxon has not been examined critically)

C. obliqua L., rose turtlehead, pink turtlehead, p. 1340
- **var. speciosa** Pennell & Wherry

COLLINSIA

Collinsia verna Nutt., blue-eyed Mary, p. 1347
C. **violacea** Nutt., violet collinsia, p. 1347
f. pallida E. J. Palmer
f. violacea

CONOBEA
(see LEUCOSPORA)

CYMBALARIA

♦**Cymbalaria muralis** Gaertner, G. Meyer & Scherb., kenilworth ivy, p. 1350

DASISTOMA, mullein foxglove
[S: SEYMERIA] (Pennell, 1928; Bentz and Cooperrider, 1978)

Dasistoma macrophylla (Nutt.) Raf., mullein foxglove, false foxglove [S: *Seymeria macrophylla* Nutt.] (Pennell, 1928), p. 1357

GERARDIA
(see AGALINIS, AUREOLARIA, TOMANTHERA)

GRATIOLA, hedge hyssop

Gratiola neglecta Torrey, clammy hedge hyssop, hedge hyssop, p. 1333
G. **virginiana** L., round-fruited hedge hyssop, hedge hyssop, p. 1333
G. **viscidula** Pennell, sticky hedge hyssop, hedge hyssop, p. 1333
ssp. viscidula

KICKXIA, canker root

♦**Kickxia elatine** (L.) Dumort., cancer root, canker root, p. 1350
ssp. elatine
♦**K. spuria** (L.) Dumort., female fluellin, p. 1350
ssp. spuria

LEUCOSPORA
[S: CONOBEA] (Pennell, 1935)

Leucospora multifida (Michaux) Nutt. [S: *Conobea multifida* (Michaux) Benth.] (Pennell, 1935), p. 1333

LIMOSELLA, mudwort

Limosella aquatica L., p. 1338

LINARIA, toadflax
(see also NUTTALLANTHUS)

♦**Linaria vulgaris** Miller, butter and eggs, p. 1348
f. vulgaris

LINDERNIA, false pimpernel

Lindernia dubia (L.) Pennell [S: *L. dubia*, incl. var. *riparia* (Raf.) Fern., *L. anagallidea* (Michaux) Pennell; M: *L. dubia*, incl. var. *anagallidea* (Michaux) Cooperr., var. *riparia* (Raf.) Fern.] (Cooperrider and McCready, 1975; Cooperrider, 1976) (note that the taxonomic problems in *Lindernia* require further study; see G:), p. 1338

MAZUS

♦**Mazus pumilus** (Burm. f.) Steenis, mazus [S: *M. japonicus* (Thunb.) Kuntze] (van Steenis, 1958), p. 1336

MECARDONIA
[S: BACOPA] (Pennell, 1946)

Mecardonia acuminata (Walter) Small [S: *Bacopa acuminata* (Walter) Robinson] (Pennell, 1946), p. 1332

MIMULUS, monkey flower

Mimulus alatus Sol., sharpwing monkey flower, p. 1334
f. alatus
f. albiflorus House
M. glabratus Humb., Bonpl. & Kunth, roundleaf monkey flower, yellow monkey flower, p. 1336
var. fremontii (Benth.) A. L. Grant
M. ringens L., Allegheny monkey flower, p. 1334
var. minthodes (E. Greene) A. L. Grant
var. ringens

NUTTALLANTHUS
[S, G, M: LINARIA] (Sutton, 1988)

Nuttallanthus canadensis (L.) D. Sutton, blue toadflax, old-field toadflax [S, G, M: *Linaria canadensis* (L.) Chaz.] (Sutton, 1988), p. 1348
N. texanus (Scheele) D. Sutton, southern blue toadflax [S, G: *Linaria canadensis* var. *texana* (Scheele) Pennell; M: *Linaria texana* Scheele] (Sutton, 1988), p. 1350

PAULOWNIA, empress tree

♦**Paulownia tomentosa** (Thunb.) Steudel, empress tree, princess tree, p. 1330

S: Steyermark G: Great Plains Flora M: Mohlenbrock

PEDICULARIS, wood betony, lousewort

Pedicularis canadensis L., common lousewort, wood betony, p. 1366
- **f. albescens** Steyerm.
- **f. canadensis**

P. lanceolata Michaux, swamp lousewort, swamp wood betony, p. 1367

PENSTEMON, beard-tongue

Penstemon arkansanus Pennell, Arkansas beard-tongue, p. 1344
P. cobaea Nutt., cobaea beard-tongue, p. 1343
- **var. cobaea**
- **var. purpureus** Pennell

P. digitalis Nutt. ex Sims, smooth beard-tongue [S, M: incl. *P. alluviorum* Pennell] (Koelling, 1964; Cooperrider, 1976), p. 1343
- **f. digitalis**
- **f. baueri** Steyerm. [G: *P. digitalis*] (the validity of this taxon has not been studied critically)

P. grandiflorus Nutt., large beard-tongue, p. 1342
P. pallidus Small, pale beard-tongue, p. 1344
P. tubiflorus Nutt., p. 1343

SCROPHULARIA, figwort

Scrophularia lanceolata Pursh, figwort, early figwort, p. 1346
S. marilandica L., figwort, carpenter's square, late figwort, p. 1346
- **f. marilandica**
- **f. neglecta** (Rydb. ex Small) Pennell [G, M: *S. marilandica*] (Pennell, 1935) (the validity of this taxon has not been studied critically)

SEYMERIA (see DASISTOMA)

TOMANTHERA
[S: GERARDIA] (Pennell, 1928; Shinners, 1962a)

Tomanthera auriculata (Michaux) Raf., auriculate false foxglove [S: *Gerardia auriculata* Michaux] (Pennell, 1928; Bentz and Cooperrider, 1978), p. 1361

VERBASCUM, mullein

♦**Verbascum blattaria** L., moth mullein, p. 1339
f. blattaria
f. albiflora (Don) House [S: *V. blattaria* f. *erubescens* Brügger] (Don's epithet appears to be the oldest)
♦**V. thapsus** L., mullein, flannel plant, p. 1339
f. thapsus

VERONICA, speedwell

Veronica americana (Raf.) Schwein. ex Benth., American brooklime, p. 1354
*♦**V. anagallis-aquatica** L., water speedwell (Nightingale and Olson, 1984)
♦**V. arvensis** L., corn speedwell , p. 1356
V. catenata Pennell, water speedwell [S: *V. comosa* Richter] (Burnett, 1950), p. 1354
var. catenata
var. glandulosa (Farw.) Pennell [S: *V. comosa* Richter] (Pennell, 1921)
*♦**V. chamaedrys** L., germander speedwell (Dunn, 1982)
*♦**V. hederifolia** L., ivy-leaved speedwell (Key, 1980; Dunn, 1982)
*♦**V. latifolia** L., saw-leaved speedwell (Castaner, 1982c)
♦**V. longifolia** L., garden speedwell, p. 1354

Veronica peregrina L., neckweed, purslane speedwell, p. 1356
var. peregrina
var. xalapensis (Humb., Bonpl. & Kunth) St. John & Warren [**M:** *V. peregrina* ssp. *xalapensis* (Humb., Bonpl. & Kunth) Pennell] (Pennell first recognized this taxon as a variety and later elevated it to subspecific rank; we have retained the earlier treatment, which has been used more commonly by other authors)
*♦**V. persica** Poiret, bird's-eye speedwell (Castaner, 1982c; Dunn, 1982)
♦**V. polita** Fries, wayside speedwell [**G:** *V. agrestis* L.] (Pennell, 1921, 1935), p. 1356
♦**V. serpyllifolia** L., thyme-leaved speedwell, p. 1354
var. serpyllifolia

VERONICASTRUM

Veronicastrum virginicum (L.) Farw., culver's root, p. 1351
f. villosum (Raf.) Pennell [**M:** *V. virginicum*] (Pennell, 1935)
f. virginicum

SIMAROUBACEAE, quassia family

AILANTHUS, tree-of-heaven

♦**Ailanthus altissima** (Miller) Swingle, tree-of-heaven, stinkweed, p. 969

SOLANACEAE, nightshade family

DATURA, jimsonweed, thorn apple

♦**Datura innoxia** Miller, hairy jimsonweed, p. 1325
♦**D. stramonium** L., p. 1324
var. stramonium
var. tatula (L.) Torrey, purple jimsonweed [G: *D. stramonium*] (the validity of this taxon has not been investigated critically)

LYCIUM, wolfberry

♦**Lycium barbarum** L., matrimony vine [S, G: *L. halimifolium* Miller] (Feinbrun and Stearn, 1963), p. 1324
♦**L. chinense** Miller, Chinese matrimony vine, p. 1324

LYCOPERSICON, tomato

♦**Lycopersicon esculentum** Miller, tomato, garden tomato, p. 1314

NICANDRA, apple of Peru

♦**Nicandra physalodes** (L.) Gaertner, apple of Peru, shoo-fly plant, p. 1322

NICOTIANA, tobacco

♦**Nicotiana longiflora** Cav., long-flowered tobacco, p. 1325
♦**N. rustica** L., wild tobacco, p. 1325

PETUNIA, petunia

♦**Petunia axillaris** (Lam.) Britton, Sterns & Pogg., white petunia, p. 1326
♦**P. violacea** Lindley, violet petunia, p. 1326

PHYSALIS, ground cherry, husk tomato

***♦Physalis acutifolia** (Miers) Sandw. (Mühlenbach, 1979)
***♦P. alkekengi** L., Chinese lantern plant (Dunn, 1982)
P. angulata L., cutleaf ground cherry, p. 1320
var. angulata
var. pendula (Rydb.) Waterf. [**M:** *P. pendula* Rydb.] (Waterfall, 1958)
♦P. cinerascens (Dunal) A. Hitchc., p. 1316
var. cinerascens [**S, G:** *P. viscosa* L. ssp. *mollis* (Nutt.) Waterf. var. *cinerascens* (Dunal) Waterf.] (Sullivan, 1985)
P. heterophylla Nees, clammy ground cherry, p. 1317
var. heterophylla
P. longifolia Nutt., common ground cherry, p. 1318
var. longifolia
var. subglabrata (Mackenzie & Bush) Cronq. [**M:** *P. subglabrata* Mackenzie & Bush; **G:** *P. longifolia*] (the infraspecific taxonomy of *P. longifolia* is poorly understood and requires further study)
f. subglabrata
f. macrophysa (Rydb.) Steyerm. [**M:** *P. macrophysa* Rydb.] (see explanation above)
♦P. philadelphica Lam., strawberry tomato, tomatillo [**S, M:** *P. ixocarpa* Brot. ex Hornem.] (Fernandes, 1970), p. 1320
P. pubescens L., downy ground cherry, annual ground cherry (note that the *P. pubescens* complex is in great need of detailed systematic study; the treatment here is in some ways intermediate between the relatively conservative treatment in most floras (**G:**) and the more liberal treatments of Waterfall (1958) and Sullivan (1984), which themselves are not in total agreement), p. 1321
var. missouriensis (Mackenzie & Bush) Waterf. [**S:** *P. missouriensis* Mackenzie & Bush; **G:** *P. pubescens*] (Waterfall, 1968)
var. pubescens [**S:** incl. var. *glabra* (Michaux) Waterf., var. *grisea* Waterf., var. *integrifolia* (Dunal) Waterf.] (Waterfall, 1968; Sullivan, 1984)

Physalis pumila Nutt., prairie ground cherry, p. 1317
ssp. hispida (Waterf.) Hinton [**S:** *P. longifolia* var. *hispida* (Waterf.) Steyerm.] (Hinton, 1976)
ssp. pumila
P. virginiana Miller, p. 1317

SOLANUM, nightshade

Solanum carolinense L., horse nettle, bull nettle [**S:** incl. f. *albiflorum* (Kuntze) Benke] (D'Arcy, 1974), p. 1313
var. carolinense
♦**S. dimidiatum** Raf., western horse nettle [**S:** *S. torreyi* A. Gray] (D'Arcy, 1974), p. 1313
♦**S. dulcamara** L., climbing nightshade, bitterwseet, p. 1311
S. elaeagnifolium Cav., white horse nettle, silverleaf nightshade, p. 1313
S. ptycanthum Dunal ex DC., black nightshade [**S:** *S. americanum* Miller] (Schilling, 1981), p. 1312
♦**S. rostratum** Dunal, buffalo bur, Kansas thistle [**M:** *S. cornutum* Lam.] (Whalen, 1979), p. 1313
♦**S. sarrachoides** Sendtner, viscid nightshade, p. 1312
♦**S. triflorum** Nutt., cutleaf nightshade, p. 1312
♦**S. tuberosum** L., potato, p. 1312
S. villosum Miller, see excluded taxa

STAPHYLEACEAE, bladdernut family

STAPHYLEA, bladdernut

Staphylea trifolia L., American bladdernut, p. 1010

STERCULIACEAE, chocolate family

MELOCHIA

*♦**Melochia corchorifolia** L., chocolate weed (Mühlenbach, 1979)

STYRACACEAE, styrax family

STYRAX, styrax, storax

Styrax americanum Lam., snowbell, American snowbell, mock orange, p. 1176

TAMARICACEAE, tamarisk family

TAMARIX, tamarisk

Tamarix gallica L., see excluded taxa
***♦T. parviflora** DC. (Baum, 1967)

THYMELAEACEAE, mezereum family

DIRCA, leatherwood

Dirca palustris L., p. 1086

TILIACEAE, linden family

TILIA, basswood, linden

Tilia americana L., p. 1042
var. americana American basswood [**S, M:** incl. var. *neglecta* (Spach) Fosb.] (Jones, 1968; Hardin, 1990)
var. heterophylla (Vent.) Loudon, white basswood, white linden, silver-leaved linn [**S, M:** *T. heterophylla* Vent.] (Hardin, 1990)

ULMACEAE, elm family

CELTIS, hackberry

Celtis laevigata Willd., sugarberry, southern hackberry, p. 559
- **var. laevigata**
- **var. smallii** (Beadle) Sarg.
- **var. texana** Sarg.

C. **occidentalis** L., northern hackberry, nettle tree, p. 558
- **var. canina** (Raf.) Sarg.
- **var. occidentalis**
- **var. pumila** (Pursh) A. Gray

C. **tenuifolia** Nutt., dwarf hackberry, p. 559
- **var. georgiana** (Small) Fern. & B. G. Schubert [**G:** *C. tenuifolia*] (the validity of varieties in this and other *Celtis* species is suspect; see Wagner (1974) for discussion)
- **var. tenuifolia**

PLANERA, water elm, planer tree

Planera aquatica (Walter) J. Gmelin, p. 556

ULMUS, elm

Ulmus alata Michaux, winged elm, wahoo, p. 555
U. **americana** L., American elm, white elm, p. 554
*U. **crassifolia** Nutt., cedar elm (Heineke, 1987)
♦U. **pumila** L., Siberian elm, dwarf elm, p. 555
U. **rubra** Muhlenb., slippery elm, p. 555
U. **thomasii** Sarg., rock elm, cork elm, p. 554

UMBELLIFERAE (see APIACEAE)

URTICACEAE, nettle family

BOEHMERIA

Boehmeria cylindrica (L.) Sw., false nettle, p. 568
var. cylindrica
var. drummondiana (Wedd.) Wedd. [G: *B. cylindrica*] (the validity of this taxon has not been studied critically)

LAPORTEA

Laportea canadensis (L.) Wedd., wood nettle, p. 568

PARIETARIA, pellitory

Parietaria pensylvanica Muhlenb. ex Willd., Pennsylvania pellitory, pellitory, p. 570
var. obtusa (Rydb. ex Small) Shinn.
var. pensylvanica

PILEA

Pilea pumila (L.) A. Gray, clearweed, p. 570

URTICA, nettle

Urtica chamaedryoides Pursh, nettle, weak nettle, p. 567
U. dioica L., tall nettle, p. 567
ssp. gracilis (Aiton) Selander [S: *U. dioica* var. *procera* (Muhlenb. ex Willd.) Wedd.] (Woodland, 1982)
♦**U. urens** L., dwarf nettle, burning nettle, p. 567

VALERIANACEAE, valerian family

VALERIANELLA, corn salad

♦**Valerianella locusta** (L.) Betcke, corn salad, lamb's lettuce [S: *V. olitoria* (L.) Poll.] (Ware, 1969), p. 1420

V. ozarkana Dyal, p. 1421

f. bushii (Dyal) D. Ware [S: *V. bushii* Dyal] (Ware, 1969, 1983)

f. ozarkana

V. radiata (L.) Dufr., p. 1420

f. fernaldii (Dyal) D. Ware [S: *V. radiata* var. *fernaldii* Dyal] (Ware, 1969, 1983)

f. parviflora (Dyal) D. Ware [S: *V. stenocarpa* (Engelm.) Krok var. *parviflora* Dyal; G: *V. radiata*] (Ware, 1969, 1983)

f. radiata [S, M: incl. *V. radiata* var. *missouriensis* Dyal] (Ware, 1969)

*V. **woodsiana** (Torrey & A. Gray) Walp. (Ware, 1969)

VERBENACEAE, vervain family
[S, M: incl. PHRYMACEAE]

CALLICARPA, beauty berry

Callicarpa americana L., beauty berry, French mulberry, p. 1262

GLANDULARIA
[S, G: VERBENA] (Umber, 1979)

♦**Glandularia bipinnatifida** (Nutt.) Nutt., Dakota vervain, cutleaf vervain [S, G: *Verbena bipinnatifida* Nutt.] (Umber, 1979), p. 1261

var. bipinnatifida

Glandularia canadensis (L.) Nutt., rose vervain, rose verbena, eastern verbena [S: *Verbena canadensis* (L.) Britton, incl. "f. candidissima" (Haage & Schmidt) E. J. Palmer & Steyerm.; G: *Verbena canadensis*] (Umber, 1979) (note that the name "f. *candidissima*" is illegitimate, the basionym apparently never having been published validly; this error was propagated by Umber (1979), who transferred the illegitimate epithet to *Glandularia*), p. 1261

LIPPIA (see PHYLA)

PHRYMA

Phryma leptostachya L., lopseed, p. 1380
var. leptostachya

PHYLA, fog fruit, frog fruit [S, G: LIPPIA] (Greene, 1899)

(Note that although many authors, including the current authority on the family, Harold Moldenke, segregate our herbaceous species from *Lippia*, there is no consensus on this practice and there exists no modern monograph of the group.)

Phyla lanceolata (Michaux) E. Greene, northern fog fruit, northern frog fruit [S, G: *Lippia lanceolata* Michaux] (Greene, 1899), p. 1261

P. nodiflora (L.) E. Greene, common fog fruit, common frog fruit, turkey tangle [S, G: *Lippia nodiflora* (L.) Michaux] (Greene, 1899) (note that several varieties have been described for this species, but the validity of these taxa has not been examined critically), p. 1262

VERBENA
(see also GLANDULARIA)

Verbena x *blanchardii* Mold., see excluded taxa
V. bracteata Lagasca & Rodriguez, creeping vervain, prostrate vervain, p. 1260
*♦**V. brasiliensis** Vell. Conc. (Mühlenbach, 1979)
V. x *deamii* Mold., see named hybrids
V. x *engelmannii* Mold., see named hybrids
V. hastata L., blue vervain, p. 1258
f. albiflora Mold.
f. hastata
f. rosea Cheney [**M:** *V. hastata*] (the validity of maintaining the various color-forms of this species has not been evaluated critically)
V. x *illicita* Mold., see named hybrids
V. x *moechina* Mold., see named hybrids
*♦**V. officinalis** L. (Mühlenbach, 1979)
ssp. halei (Small) S. Barber, Texas vervain [*V. halei* Small] (Barber, 1982)
V. x *perriana* Mold., see named hybrids
V. x *rydbergii* Mold., see named hybrids
V. simplex Lehm., narrow-leaved vervain, p. 1260
V. stricta Vent., hoary vervain, p. 1260
f. albiflora Wadm. [**M:** *V. stricta*] (the validity of maintaining the various color-forms of this species has not been evaluated critically)
f. roseiflora Benke [**M:** *V. stricta*] (see f. *albiflora*)
f. stricta
V. urticifolia L., white vervain, nettle-leaved vervain, p. 1257
var. urticifolia
***var. leiocarpa** Perry & Fern. (Moldenke, 1980)
V. xutha Lehm., see excluded taxa

VIOLACEAE, violet family

HYBANTHUS

Hybanthus concolor (T. Forster) Sprengel, green violet [**S:** incl. "f. *subglaber* (Eames) Zenkert"] (the validity of this forma has not been examined critically and the epithet apparently has never been validly transferred from the genus *Cubelium*), p. 1068

VIOLA, violet

***Viola affinis** Le Conte, woodland blue violet (Russell, 1965)
***♦V. arvensis** Murray, wild pansy (Mühlenbach, 1983)
V. x *bernardii* E. Greene, see named hybrids
V. cucullata Aiton, marsh violet [**M:** *V. obliqua* Hill] (see Voss (1985b) for discussion of the confusion surrounding the proper name for this taxon), p. 1071
f. cucullata
V. x *greenei* House, see named hybrids
V. lanceolata L., lance-leaved violet, p. 1078
ssp. lanceolata
V. macloskeyi F. Lloyd, smooth white violet, northern white violet, p. 1078
ssp. pallens (Banks ex DC.) M. Baker [**S:** *V. pallens* (Banks ex DC.) Brainerd] (Russell, 1965)
V. missouriensis E. Greene, Missouri violet [**G:** *V. pratincola* E. Greene] (the synonymy in **G:** apparently refers to misdetermined specimens and the exclusion of *V. missouriensis* from the Great Plains region, rather than to nomenclatural synonymy; note that the validity of this taxon requires further study), p. 1074
V. pedata L., bird's foot violet, pansy violet, hens and roosters [**S:** incl. var. *linearíloba* DC.] (Russell, 1959, 1965), p. 1071
f. alba (Thurber) Britton
f. pedata
V. pedatifida G. Don, prairie violet, larkspur violet, p. 1078

Viola x *populifolia* E. Greene, see named hybrids
*V. **pratincola** E. Greene, blue prairie violet (Russell, 1965)
V. **pubescens** Aiton, yellow violet [S: *V. pensylvanica* Michaux] (Russell, 1965; Voss, 1985b), p. 1080
var. eriocarpa (Schwein.) N. Russell, smooth yellow violet [S: *V. pensylvanica* var. *pensylvanica*] (Russell, 1965)
var. pubescens [S: *V. pensylvanica* var. *leiocarpa* (Fern. & Wieg.) Fern.] (Russell, 1965; Voss, 1985b)
V. **rafinesquii** E. Greene, field pansy, wild pansy, Johnny-jump-up [S: *V. kitaibeliana* Roemer & Schultes var. *rafinesquii* (E. Greene) Fern.] (Shinners, 1961; Clausen et al., 1964), p. 1081
V. **sagittata** Aiton, arrow-leaved violet, arrowhead violet, p. 1076
V. **sororia** Willd., common violet, meadow violet, butterfly violet [S: incl. *V. papilionacea* Pursh, *V.* x *napae* House (described as *V. papilionacea* x *V. sororia*); M: *V. pratincola* E. Greene] (Russell, 1965; note that there is some disagreement as to the presumed hybridity of plants attributed to *V.* x *napae*), p. 1072, 1074
f. beckwithae House
f. priceana (Pollard) Cooperr., Confederate violet [S: *V. papilionacea* f. *albiflora* Grover; M: *V. priceana* Pollard] (Cooperrider, 1984)
f. sororia
V. **striata** Aiton, pale violet, cream violet, p. 1080
f. striata
♦V. **tricolor** L., miniature pansy, Johnny-jump-up, heart's ease, p. 1080
V. **triloba** Schwein., cleft violet, three-lobed violet, p. 1076
f. albida Steyerm.
f. dilatata (Elliott) E. J. Palmer & Steyerm. [M: *V. triloba* var. *dilatata* (Elliott) Brainerd] (Palmer and Steyermark, 1958)
f. triloba
V. **viarum** Pollard, plains violet, p. 1077
f. pilifera E. J. Palmer & Steyerm.
f. viarum

VISCACEAE, mistletoe family
[S: LORANTHACEAE]

PHORADENDRON, American mistletoe

Phoradendron leucarpum (Raf.) Rev. & M. Johnston, eastern mistletoe [S: *P. flavescens* Nutt. ex Engelm.; G, M: *P. serotinum* (Raf.) M. Johnston] (Reveal and Johnston, 1989), p. 571

VITACEAE, grape family

AMPELOPSIS

Ampelopsis arborea (L.) Koehne, pepper vine, p. 1032
A. cordata Michaux, raccoon grape, false grape, heartleaf ampelopsis, p. 1031

CISSUS, possum grape

Cissus incisa (Nutt. ex Torrey & A. Gray) Des Moul., marine vine, marine ivy, p. 1032

PARTHENOCISSUS, woodbine

Parthenocissus quinquefolia (L.) Planchon, Virginia creeper, woodbine, p. 1034
var. quinquefolia
f. hirsuta (Donn) Fern.
f. quinquefolia
***♦P. tricuspidata** (Siebold & Zucc.) Planchon (Mühlenbach, 1979)
P. vitacea (Knerr) A. Hitchc. [S, M: *P. inserta* (A. Kerner) K. Fritsch, incl. f. *dubia* Rehder] (Gleason, 1947; Brizicky, 1965) (note that no combination for f. *dubia* presently exists under *P. vitacea* and the validity of this forma has not been studied critically), p. 1034

VITIS, grape

Vitis **aestivalis** Michaux, summer grape, pigeon grape, p. 1036
var. aestivalis
var. argentifolia (Munson) Fern. [G: *V. aestivalis*] (the validity of this taxon has not been studied critically)
V. **cinerea** (Engelm.) Engelm. ex Millardet, graybark grape, sweet winter grape, pigeon grape, p. 1037
♦V. **labruscana** L. Bailey, labruscan vineyard grape (note that this taxon represents a confusing mixture of cultivars and hybrids involving *V. labrusca* L.; the latter name is used for such plants in many floras), p. 1036
V. **palmata** M. Vahl, red grape, cat grape, catbird grape, Missouri grape, p. 1038
V. **riparia** Michaux, riverbank grape, frost grape, p. 1038
var. praecox Engelm.
var. riparia
var. syrticola (Fern. & Wieg.) Fern.
V. **rotundifolia** Michaux, muscadine, scuppernong, southern fox grape, p. 1041
V. **rupestris** Scheele, sand grape, p. 1041
f. dissecta (Eggert) Fern.
f. rupestris
V. **vulpina** L., winter grape, frost grape, chicken grape, p. 1040

ZYGOPHYLLACEAE, caltrop family

KALLSTROEMIA

Kallstroemia hirsutissima Vail, see excluded taxa
*♦K. **parviflora** Norton (Porter, 1969a, b; see also S: p. 966)

TRIBULUS

♦**Tribulus terrestris** L., puncture vine, caltrop, p. 964

CLASS LILIOPSIDA, monocots

AGAVACEAE, agave family, century plant family [S: AMARYLLIDACEAE; M: LILIACEAE]

AGAVE (see MANFREDA)

MANFREDA, American aloe [S: AGAVE] (Gentry, 1972; Verhoek, 1978)

Manfreda virginica (L.) Rose, false aloe, rattlesnake master [S: *Agave virginica* L.] (Gentry, 1972), p. 457
var. tigrina (Engelm.) Rose [S: *Agave virginica* f. *tigrina* (Engelm.) E. J. Palmer & Steyerm.] (this should continue to be treated as a forma, but the proper combination under *Manfreda virginica* does not exist yet)
var. virginica

YUCCA, soapweed, Spanish bayonet

Yucca glauca Nutt., soapweed, p. 439
var. glauca
var. mollis Engelm.
♦**Y. smalliana** Fern. Spanish bayonet, Adam's needle [M: *Y. flaccida* Haw.] (Fernald, 1944), p. 439

ALISMATACEAE, water plantain family

ALISMA, water plantain

Alisma plantago-aquatica L. [S: *A. plantago-aquatica* var. *plantago-aquatica*], see excluded taxa
A. subcordatum Raf. [S, M: *A. plantago-aquatica* var. *parviflorum* (Pursh) Torrey] (Björkvist, 1967, 1968), p. 58

Alisma triviale Pursh, [S, M: *A. plantago-aquatica* var. *americanum* Schultes & Schultes f.] (Björkvist, 1967, 1968), p. 58

ECHINODORUS, burhead

Echinodorus berteroi (Sprengel) Fassett [G: *E. rostratus* (Nutt.) Engelm.] (Fassett, 1955; Rataj, 1975), p. 60
var. berteroi [S, M: var. *lanceolatus* (Engelm.) Fassett] (Rataj, 1975)
E. cordifolius (L.) Griseb., p. 60
E. tenellus (Mart.) Buchenau, p. 60
var. parvulus (Engelm.) Fassett [G: *E. parvulus* Engelm.] (Fassett, 1955)

SAGITTARIA, arrowhead

Sagittaria ambigua J. G. Smith, p. 64
S. australis (J. G. Smith) Small, see excluded taxa
S. brevirostra Mackenzie & Bush [S: *S. engelmanniana* J. G. Smith ssp. *brevirostra* (Mackenzie & Bush) Bogin] (Beal et al., 1982), p. 64
S. calycina Engelm. [S: *S. montevidensis* Cham. & Schldl. ssp. *calycina* (Engelm.) Bogin] (Beal, 1960), p. 62
var. calycina
S. graminea Michaux, p. 63
var. graminea
S. latifolia Willd., duck potato, common arrowhead, wapato, p. 64
var. latifolia [S: incl. f. *gracilis* (Pursh) Robinson, f. *hastata* (Pursh) Robinson, var. *obtusa* (Muhlenb.) Wieg.] (Bogin, 1955)
S. platyphylla (Engelm.) J. G. Smith [S, G: *S. graminea* var. *platyphylla* Engelm.] (Wooten, 1973), p. 64
S. rigida Pursh [S: incl. f. *elliptica* (Engelm.) Fern., f. *fluitans* (Engelm.) Fern.] (Bogin, 1955), p. 63

AMARYLLIDACEAE (see LILIACEAE)

ARACEAE, arum family

ACORUS, sweet flag, calamus

Acorus americanus Raf., sweet flag [**S, G:** *A. calamus* L.] (Wilson, 1960), p. 386

ARISAEMA, Jack-in-the-pulpit

Arisaema dracontium (L.) Schott, green dragon, dragon root, p. 384
A. triphyllum (L.) Schott, Jack-in-the-pulpit, Indian turnip, p. 383
ssp. triphyllum [**S:** *A. atrorubens* (Aiton) Blume, incl. f. *atrorubens*, f. *viride* (Engl.) Fern., f. *zebrinum* (Sims) Fern.] (Huttleston, 1984)

PELTANDRA, arrow arum

Peltandra virginica (L.) Schott & Endl., arrow arum, p. 384
ssp. virginica [**S:** incl. f. *hastifolia* S. F. Blake] (Blackwell and Blackwell, 1974)

SYMPLOCARPUS

Symplocarpus foetidus (L.) Nutt., see excluded taxa

COMMELINACEAE, spiderwort family

COMMELINA, dayflower

Commelina caroliniana Walter, see excluded taxa
♦**C. communis** L., p. 397
C. diffusa Burm. f., p. 398
var. diffusa

Commelina erecta L., p. 400
var. angustifolia (Michaux) Fern. [M: *C. erecta*] (Brashier, 1966)
f. angustifolia
f. crispa (Wooton) Fern. [M: *C. erecta*] (Brashier, 1966)
var. deamiana Fern. [M: *C. erecta*] (Brashier, 1966)
var. erecta
f. erecta
f. intercursa Fern.
C. virginica L., p. 398

TRADESCANTIA, spiderwort

Tradescantia bracteata Small, p. 396
T. ernestiana E. S. Anderson & Woodson, p. 394
f. ernestiana
T. longipes E. S. Anderson & Woodson, wild crocus, p. 396
T. ohiensis Raf., p. 396
T. ozarkana E. S. Anderson & Woodson, Ozark spiderwort, p. 393
T. subaspera Ker Gawler, p. 393
var. subaspera
T. tharpii E. S. Anderson & Woodson, p. 396
T. virginiana L., p. 394
f. virginiana

CYPERACEAE, sedge family

BULBOSTYLIS

Bulbostylis capillaris (L.) C. B. Clarke, p. 282

CAREX, sedge

Carex aggregata Mackenzie, p. 334
C. alata Torrey, p. 344

Carex albicans Willd. ex Sprengel, p. 347
- **var. albicans** [S, M: *C. physorhyncha* Liebm. ex Steudel] (Rettig, 1989, 1990a, b) (note that Rettig first made this and the following nomenclatural transfers to varieties of *C. emmonsii* Dewey ex Torrey, but later (Rettig, 1990b) corrected himself to the presently accepted nomenclature)
- **var. muhlenbergii** (A. Gray) Rettig [S, G, M: *C. artitecta* Mackenzie] (Rettig, 1989, 1990a, b)

C. albolutescens Schwein., p. 343
C. albursina E. Sheldon, p. 354
C. amphibola Steudel, p. 358
- **var. amphibola**
- **var. globosa** (L. Bailey) L. Bailey
- **var. rigida** (L. Bailey) Fern. [M: *C. amphibola*] (Fernald, 1942b)
- **var. turgida** Fern. [M: *C. grisea* Wahlenb.] (Fernald, 1942b)

C. annectens (E. Bickn.) E. Bickn., p. 335
- **var. annectens**
- **var. xanthocarpa** (E. Bickn.) Wieg.

C. aquatilis Wahlenb., p. 368
- **var. aquatilis** [S, G: var. *altior* (Rydb.) Fern.; M: *C. substricta* (Kük.) Mackenzie] (Voss, 1972; Castaner, 1985; Standley, 1985)

C. arkansana (L. Bailey) L. Bailey, p. 332
C. atherodes Sprengel, p. 376
***C. atlantica** L. Bailey (Reznicek and Ball, 1980; Orzell and Bridges, 1989)
- **ssp. atlantica**

C. bicknellii Britton, p. 344
- **var. bicknellii**
- ***var. opaca** F. J. Herm. (Castaner, 1989)

C. blanda Dewey, p. 354
C. brevior (Dewey) Mackenzie ex Lunell, p. 343
***C. bromoides** Schk. ex Willd. (Christ, 1980)
C. bushii Mackenzie, p. 364
C. buxbaumii Wahlenb., p. 368
- **f. buxbaumii**
- **f. dilutior** Kük.

C. careyana Torrey ex Dewey, p. 352

S: Steyermark G: Great Plains Flora M: Mohlenbrock

Carex caroliniana Schwein., p. 364
C. **cephalophora** Willd., p. 331
var. cephalophora
var. mesochorea (Mackenzie) Gleason
C. **cherokeensis** Schwein., p. 363
C. **communis** L. Bailey, p. 348
C. **comosa** Boott, p. 372
C. **complanata** Torrey & Hook., p. 363
var. complanata
var. hirsuta (L. Bailey) Gleason [G, M: *C. hirsutella* Mackenzie] (see S: for brief discussion; this taxon has not been evaluated critically and may represent a good species)
C. **conjuncta** Boott, p. 340
C. **conoidea** Schk. ex Willd., p. 356
C. **crawei** Dewey, p. 355
*♦C. **crawfordii** Fern. (Mühlenbach, 1983)
C. **crinita** Lam., fringed sedge, p. 372
var. brevicrinis Fern.
var. crinita
C. **cristatella** Britton, p. 341
C. **crus-corvi** Shuttlew. ex Kunze, p. 338
C. **davisii** Schwein. & Torrey, p. 362
f. davisii
f. glabrescens Kük.
C. x *deamii* F. J. Herm., see named hybrids
C. **debilis** Michaux, p. 362
var. debilis
var. rudgei L. Bailey
C. **decomposita** Muhlenb., p. 336
*C. **diandra** Schrank (Kolstad, 1986)
C. **digitalis** Willd., p. 352
var. digitalis
var. macropoda Fern.
♦C. **douglasii** Boott, p. 330
C. **eburnea** Boott, p. 350
*♦C. **eleocharis** L. Bailey (Yatskievych, 1990)
C. **emoryi** Dewey, p. 370
C. **festucacea** Schk. ex Willd., p. 342

Carex flaccosperma Dewey, p. 359
var. flaccosperma
var. glaucodea (Tuckerman) Kük. [**M:** *C. glaucodea* Tuckerman] (see **S:** for discussion; this taxon has not been evaluated critically)
C. frankii Kunth, p. 378
C. gigantea Rudge, p. 383
C. gracilescens Steudel, p. 355
C. gracillima Schwein., p. 360
C. granularis Muhlenb. ex Willd., p. 355
var. granularis
var. haleana (Olney) Porter
C. gravida L. Bailey, p. 334
var. gravida
f. gravida
f. laxifolia (L. Bailey) Kük.
var. lunelliana (Mackenzie) F. J. Herm.
C. grayii J. Carey [**S:** incl. var. *hispidula* A. Gray] (Reznicek and Ball, 1974), p. 380
C. haydenii Dewey, p. 370
C. hirtifolia Mackenzie, p. 351
C. hitchcockiana Dewey, p. 356
C. hyalinolepis Steudel, p. 374
C. hystericina Muhlenb. ex. Willd., p. 372
C. inops L. Bailey, p. 348
ssp. heliophila (Mackenzie) Crins [**S:** *C. pensylvanica* Lam. var. *digyna* Boeckeler; **G:** *C. heliophila* Mackenzie] (Crins and Ball, 1983), p. 348
C. interior L. Bailey, p. 340
C. intumescens Rudge, p. 382
C. jamesii Schwein., p. 346
C. joori L. Bailey, p. 366
C. lacustris Willd., p. 374
C. laeviconica Dewey, p. 376
C. laevivaginata (Kük.) Mackenzie, p. 338
C. lanuginosa Michaux, p. 364
C. laxiculmis Schwein., p. 354
C. leavenworthii Dewey, p. 331
C. leptalea Wahlenb., p. 346
C. louisianica L. Bailey, p. 382

Carex lupuliformis Sartwell, p. 382
C. **lupulina** Muhlenb., hop sedge [**S:** incl. var. *pedunculata* A. Gray] (Reznicek and Ball, 1974), p. 382
C. **lurida** Wahlenb., p. 374
C. **meadii** Dewey, p. 351
C. **microdonta** Torrey & Hook., p. 356
C. **microrhyncha** Mackenzie [**S:** *C. abdita* E. Bickn.] (Mackenzie, 1913; Kolstad, 1986) (note that **M:** *C. abdita* is a different, accepted species not occurring in Missouri), p. 348
C. **molesta** Mackenzie, p. 343
C. **muhlenbergii** Schk. ex Willd., p. 332
var. australis Olney [**M:** *C. austrina* (Small) Mackenzie] (see **S:** for discussion; this taxon has not been evaluated critically and may represent a good species)
var. enervis Boott
var. muhlenbergii
C. **muskingumensis** Schwein., p. 340
♦C. **nebraskensis** Dewey, p. 368
C. **nigromarginata** Schwein., p. 347
var. nigromarginata
C. **normalis** Mackenzie, p. 342
f. normalis
f. perlonga Fern.
C. **oklahomensis** Mackenzie, p. 338
C. **oligocarpa** Schk. ex Willd., p. 356
C. **oxylepis** Torrey & Hook., p. 360
var. oxylepis
C. **pensylvanica** Lam., p. 347
*C. **platyphylla** J. Carey (Bryson, 1980)
♦C. **praegracilis** W. Boott, p. 330
C. **projecta** Mackenzie, p. 341
C. **radiata** (Wahlenb.) Small [**S, G, M:** *C. rosea* Schk. ex Willd.] (Webber and Ball, 1984) (note that Mackenzie (1916) mistakenly used the name *C. rosea* Schk. ex Willd. for plants referable to *C. radiata* and our floras have followed this mistake; *C. rosea* is a different species, see below), p. 331

Carex retroflexa Muhlenb. ex Schkuhr, p. 330
var. retroflexa
var. texensis (Torrey) Fern. [**G, M:** *C. texensis* (Torrey) L. Bailey] (see **S:** for brief discussion; this taxon has not been evaluated critically and may represent a good species)
C. rosea Schk. ex Willd. [**S, G, M:** *C. convoluta* Mackenzie] (Webber and Ball, 1984) (see note under *C. radiata*, above), p. 331
C. sartwellii Dewey, p. 330
C. scabrata Schwein., p. 366
♦**C. schweinitzii** Dewey ex Schwein., p. 374
C. scoparia Schk. ex Willd., p. 340
var. scoparia
f. moniliformis (Tuckerman) Kük.
f. scoparia
C. shortiana Dewey, p. 366
***C. socialis** Mohl. & Schwegman (Mohlenbrock and Schwegman, 1969; Webber and Ball, 1984)
C. sparganioides Muhlenb. ex Willd., p. 335
C. squarrosa L., p. 378
***C. sterilis** Willd. (Orzell, 1983; Orzell and Bridges, 1989)
C. stipata Muhlenb. ex Willd., p. 338
var. maxima Chapm.
var. stipata
C. straminea Willd. [**M:** *C. richii* (Fern.) Mackenzie] (Svenson, 1938), p. 344
C. stricta Lam., tussock sedge [**S:** *C. stricta* var. *strictior* (Dewey) Carey] (Standley, 1989), p. 370
C. suberecta (Olney) Britton, p. 343
C. x *subimpressa* Clokey, see named hybrids
C. swanii (Fern.) Mackenzie, p. 363
***C. sychnocephala** J. Carey (Castaner, 1988)
C. tenera Dewey, p. 342
C. tetanica Schk., p. 351
C. tonsa (Fern.) E. Bickn., p. 350
C. torta Boott, p. 372
C. triangularis Boeckeler, p. 336
C. tribuloides Wahlenb., p. 341
C. trichocarpa Muhlenb. ex Willd., p. 376

Carex typhina Michaux, p. 378
C. **umbellata** Schk. ex Willd. [**S:** incl. f. *vicina* (Dewey) Wieg.] (Mackenzie, 1913), p. 348
C. **vesicaria** L., p. 380
var. monile (Tuckerman) Fern. [**M:** *C. vescicaria* L.] (see **S:** for brief discussion; the validity of this taxon has not been evaluated critically)
C. **virescens** Muhlenb. ex Willd., p. 363
C. **vulpinoidea** Michaux, fox sedge, p. 335
C. **woodii** Dewey, p. 352

CLADIUM (see excluded taxa)

CYPERUS, umbrella sedge (see also KYLLINGA)

Cyperus acuminatus Torrey & Hook., p. 262
C. **aristatus** Rottb., p. 260
C. **bipartitus** Torrey [**S:** *C. rivularis* Kunth, incl. f. *elutus* (C. B. Clarke) Kük.; **G, M:** *C. rivularis*] (Tucker, 1983) (note that no infraspecific combinations presently exist under *C. bipartitus*, although several additional varieties and formae have been described and may represent valid taxa), p. 260
C. **compressus** L., coco grass, p. 262
C. **croceus** M. Vahl [**S:** *C. globulosus* Aublet] (Carter, 1984; Carter and Kral, 1990), p. 270
C. **diandrus** Torrey, p. 260
C. **echinatus** (L.) Alph. Wood, hedgehog club rush [**S:** *C. ovularis* (Michaux) Torrey, incl. var. *sphaericus* Boeckeler; **G, M:** *C. ovularis*] (Carter, 1984; Carter and Kral, 1990), p. 270
C. **erythrorhizos** Muhlenb., p. 262
C. **esculentus** L., yellow nut grass, p. 264
var. esculentus
f. angustispicatus (Britton) Fern. [**M:** *C. esculentus* var. *leptostachyus* Boeckeler] (Fernald, 1942a)
f. esculentus

Cyperus flavescens L.
var. poaeformis (Pursh) Fern. [**M:** *C. flavescens*] (Voss, 1972), p. 259
***C. flavicomus** Michaux [*C. albomarginatus* (C. Martius & Schrader ex Nees) Steudel] (Dunn and Knauer, 1975; Tucker, 1985)
C. iria L., p. 263
C. lancastriensis Porter, p. 267
C. lupulinus (Sprengel) Marcks [**S, M:** *C. filiculmis* M. Vahl] (Marcks, 1974), p. 268
ssp. lupulinus
ssp. macilentus (Fern.) Marcks [**S, M:** *C. filiculmis* var. *macilentus* Fern.] (Marcks, 1974)
***C. luzulae** (L.) Retz. (Denton, 1978)
C. x *mesochorus* Geise, see named hybrids
C. odoratus L., p. 263 [**S, M:** incl. *C. engelmannii* Steudel, *C. ferruginescens* Boeckeler; **G:** incl. *C. engelmannii*] (Marcks, 1974; Tucker, 1984a)
C. plukenetii Fern., p. 268
C. polystachyos Rottb. [**S:** incl. var *texensis* (Torrey) Fern.] (Tucker, 1983), p. 260
C. pseudovegetus Steudel [**S:** *C. virens* Michaux] (Denton, 1978), p. 262
var. pseudovegetus
C. refractus Engelm. ex Steudel, p. 267
C. retrofractus (L.) Torrey [**S:** *C. dipsaciformis* Fern.] (Carter, 1984; Carter and Jarvis, 1986), p. 267
♦**C. rotundus** L., nut grass, coco grass, p. 264
C. schweinitzii Torrey, p. 268
C. setigerus Torrey & Hook., p. 264
C. strigosus L. [**S:** incl. var. *robustior* Britton] (O'Neill, 1942; Mohlenbrock, 1976), p. 266

DULICHIUM, three-way sedge

Dulichium arundinaceum (L.) Britton, three-way sedge, p. 273

ELEOCHARIS, spike rush

Eleocharis acicularis (L.) Roemer & Schultes, p. 276
- **var. acicularis**
  - **f. acicularis**
  - **f. fluitans** (Doell ex Glück) Svenson
  - **f. longicaulis** (Desmaz.) Hegi (note that although **G, M:** absorb other varieties and forms of *E. acicularis*, those listed above have not been examined critically and are probably ecological variants)

***E. atropurpurea** (Retz.) Kunth (Castaner, 1984a)

E. compressa Sullivant [**M:** *E. elliptica* Kunth var. *compressa* (Sullivant) Drapalik & Mohl.] (Harms, 1972), p. 280

E. equisetoides (Elliott) Torrey, p. 276

E. erythropoda Steudel [**S:** *E. calva* Torrey] (Svenson, 1957; L. Harms, 1968), p. 280

E. lanceolata Fern., p. 279

E. macrostachya Britton, p. 280

E. obtusa (Willd.) Schultes, p. 279
- **var. detonsa** (A. Gray) Drapalik & Mohl. [**S:** *E. engelmannii* Steudel; **G:** *E. obtusa* var. *ovata* (Roth) Drapalik & Mohl.] (Drapalik and Mohlenbrock, 1960)
- **var. obtusa** [**S:** incl. var. *jejuna* Fern.] (Svenson, 1957)

E. parvula (Roemer & Schultes) Link, p. 276
- **var. anachaeta** (Torrey) Svenson
- **var. parvula**

E. quadrangulata (Michaux) Roemer & Schultes [**S:** incl. var. *crassior* Fern.] (Mohlenbrock and Drapalik, 1962), p. 276

E. smallii Britton, p. 279

E. verrucosa (Svenson) L. Harms [**S:** *E. tenuis* (Willd.) Schultes var. *verrucosa* (Svenson) Svenson] (Harms, 1972), p. 282

E. wolfii A. Gray, p. 278

FIMBRISTYLIS

Fimbristylis annua (All.) Roemer & Schultes [**S:** *F. dichotoma* (L.) M. Vahl] (Kral, 1971), p. 284
F. autumnalis (L.) Roemer & Schultes, p. 284
F. caroliniana (Lam.) Fern., see excluded taxa
***♦F. miliacea** (L.) M. Vahl (Dunn and Knauer, 1975)
***F. puberula** (Michaux) M. Vahl (Kral, 1971; Dunn, 1982), p. 283
var. puberula
F. vahlii (Lam.) Link, p. 284

FUIRENA, umbrella grass

Fuirena simplex M. Vahl, umbrella grass, p. 300
***var. aristulata** (Torrey) Kral (Kral, 1978)
var. simplex

HEMICARPHA, see LIPOCARPHA

KYLLINGA [S, G, M: CYPERUS] (Tucker, 1984b, 1987)

Kyllinga pumila Michaux [**S, G:** *Cyperus tenuifolius* (Steudel) Dandy; **M:** *C. densicaespitosus* Mattf. & Kük.] (Tucker, 1984b), p. 272

LIPOCARPHA [S, G: HEMICARPHA; M: SCIRPUS] (Haines and Lye, 1971; Tucker, 1987)

Lipocarpha drummondii (Nees) G. Tucker [**S, G:** *Hemicarpha drummondii* Nees; **M:** *Scirpus micranthus* M. Vahl var. *drummondii* (Nees) Mohl.] (Tucker, 1987) (note that no varietal combination presently exists for *L. drummondii* under *L. micrantha*), p. 302
L. micrantha (M. Vahl) G. Tucker [**S, G:** *Hemicarpha micrantha* (M. Vahl) Britton; **M:** *Scirpus micranthus* M. Vahl] (Tucker, 1987), p. 302

S: Steyermark **G:** Great Plains Flora **M:** Mohlenbrock

RHYNCHOSPORA, beaked rush

Rhynchospora capillacea Torrey, p. 306
R. capitellata (Michaux) Vahl, false bog rush, p. 306
f. capitellata (note that S: transferred this taxon to *R. glomerata* (L.) M. Vahl var. *minor* Britton without justification (in his errata, p. 1726); we have found no publication in support of this treatment)
R. corniculata (Lam.) A. Gray, horned rush [incl. var. *interior* Fern.] (Mohlenbrock, 1976; Ohmart, 1987), p. 306
R. globularis (Chapman) Small, p. 307
var. recognita Gale [M: *R. globularis*] (Gale, 1944; Mohlenbrock, 1976)
R. harveyi W. Boott, p. 306
R. macrostachya Torrey ex A. Gray, horned rush, p. 304
var. macrostachya

SCIRPUS, bulrush (see also LIPOCARPHA)

Scirpus acutus Muhlenb. ex Bigelow, great bulrush, hardstem bulrush, p. 292
S. americanus Pers. [S: *S. olneyi* A. Gray] (Schuyler, 1974), p. 292
S. atrovirens Willd., common bulrush [S: incl. f. *sychnocephalus* (Cowles) S. F. Blake] (Schuyler, 1967), p. 296
S. cyperinus (L.) Kunth [S: incl. var. *pelius* Fern., *S. rubricosus* Fern.] (Schuyler, 1963, 1967), p. 298
***S. deltarum** Schuyler (Schuyler, 1970)
S. divaricatus Elliott, p. 298
S. etuberculatus (Steudel) Kuntze, p. 294
S. fluviatilis (Torrey) A. Gray, river bulrush, p. 294
S. georgianus Harper, common bulrush [S: *S. atrovirens* Willd. var. *georgianus* (Harper) Fern.] (Schuyler, 1967), p. 296
S. hallii A. Gray, p. 290
S. heterochaetus Chase, great bulrush, slender bulrush, p. 294
S. koilolepis (Steudel) Gleason, p. 288

Scirpus maritimus L., bayonet grass, prairie bulrush, p. 296
var. paludosus (Nelson) Kük. [**S:** *S. paludosus* Nelson var. *paludosus*; **M:** *S. paludosus*] (Koyama, 1962; Cronquist, 1977a)
S. pallidus (Britton) Fern., common bulrush [**S:** *S. atrovirens* var. *pallidus* Britton] (Schuyler, 1967), p. 296
***S. pedicellatus** Fern. (Schuyler, 1963, 1967)
S. pendulus Muhlenb. ex Elliott [**S:** *S. lineatus* Michaux] (Schuyler, 1966), p. 298
S. polyphyllus M. Vahl, p. 298
S. pungens M. Vahl, chairmaker's rush, three-square [**S:** *S. americanus* Pers.] (Schuyler, 1974), p. 290
var. pungens
***S. saximontanus** Fern. (Schuyler, 1969; Castaner, 1984a)
S. subterminalis Torrey, p. 290
S. torreyi Olney, p. 290
S. validus M. Vahl, great bulrush, softstem bulrush [**S:** incl. var. *creber* Fern.; **M:** *S. tabernaemontanii* C. Gmelin] (Mohlenbrock, 1976; Cronquist, 1977a), p. 292
S. verecundus Fern., p. 288

SCLERIA, nut grass, nut rush

Scleria ciliata Michaux, p. 308
var. ciliata
var. elliottii (Britton) Fern.
S. oligantha Michaux, p. 308
S. pauciflora Muhlenb., p. 308
var. caroliniana (Willd.) Alph. Wood
var. pauciflora
S. reticularis Michaux, p. 310
var. pubescens Britton [**S:** *S. muhlenbergii* Steudel] (Fairey, 1967)
S. triglomerata Michaux, tall nut grass [**S:** *S. nitida* Willd.] (Fairey, 1967; Kessler, 1987), p. 307
S. verticillata Muhlenb., p. 310

DIOSCOREACEAE, yam family

DIOSCOREA, yam

*♦**Dioscorea batatas** Decne., yam, Chinese yam (Nelson, 1982)
D. quaternata (Walter) J. Gmelin, wild yam, p. 455
D. villosa L., wild yam, p. 455
f. glabrifolia (Bartlett) Fern. [M: *D. villosa*] (Ward, 1977)
f. villosa

GRAMINEAE (see POACEAE)

HYDROCHARITACEAE, frogbit family

ANACHARIS (see ELODEA)

ELODEA, elodea, waterweed, bassweed [S: ANACHARIS] (St. John, 1962, 1965)

Elodea canadensis Michaux [S: *Anacharis canadensis* (Michaux) Planchon] (St. John, 1965), p. 67
E. nuttallii (Planchon) H. St. John [S: *Anacharis nuttallii* Planchon] (St. John, 1965), p. 66

LIMNOBIUM, frogbit

Limnobium spongia (Bosc) Steudel, American frogbit, p. 67

VALLISNERIA, eelgrass, tapegrass, wild celery

Vallisneria americana Michaux, American eelgrass, American wild celery, p. 67
var. americana

IRIDACEAE, iris family

BELAMCANDA

♦**Belamcanda chinensis** (L.) DC., blackberry lily, p. 464

IRIS, iris, flag

Iris brevicaulis Raf., short-stemmed iris, lamance iris, p. 463
I. cristata Sol., crested iris, dwarf wild iris, p. 460
I. fulva Ker Gawler, copper iris, red iris, p. 463
♦**I. germanica** L., German iris, blue flag, p. 462
*♦**I. orientalis** Miller (Henderson, 1980)
♦**I. pallida** Lam., flag, p. 462
♦**I. pseudacorus** L., yellow iris, yellow flag, p. 463
♦**I. pumila** L., dwarf iris, p. 462
I. virginica L., southern blue flag, p. 462
var. shrevei (Small) E. S. Anderson [**M:** *I. shrevei* Small] (Anderson, 1936; Voss, 1972)

NEMASTYLIS, celestial lily

Nemastylis geminiflora Nutt., prairie iris, p. 464
N. nuttallii Picker. ex R. Foster, p. 464

SISYRINCHIUM, blue-eyed grass

Sisyrinchium albidum Raf., p. 466
S. angustifolium Miller [**S:** *S. bermudiana* L.] (Ward, 1968), p. 467
S. atlanticum E. Bickn., p. 467
S. campestre E. Bickn., prairie blue-eyed grass, white-eyed grass, p. 466
f. campestre
f. flaviflorum (E. Bickn.) Steyerm.
f. kansanum (E. Bickn.) Steyerm. [**G:** *S. campestre*] (the status of this taxon has not been investigated

S: Steyermark **G:** Great Plains Flora **M:** Mohlenbrock

(*Sisyrinchium campestre*, continued)
taxonomically since its description and its relationship to other elements within *S. campestre* cannot presently be evaluated)

JUNCACEAE, rush family

JUNCUS, rush

Juncus acuminatus Michaux, knotty-leaved rush, p. 413
J. alpinoarticulatus Chaix [S, M: *J. alpinus* Villars var. *fuscescens* Fern.; G: *J. alpinus*] (Hämet-Ahti, 1980b) (note that var. *fuscescens* was not discussed by Hämet-Ahti; it may be worthy of recognition, but no combination exists for it under the older name *J. alpinoarticulatus*), p. 414
J. balticus Willd., p. 408
var. littoralis Engelm.
J. biflorus Elliott, p. 412
f. adinus Fern. & Griscom
f. biflorus
J. brachycarpus Engelm., p. 413
J. brachyphyllus Wieg., small-headed rush [S: *J. kansanus* F. J. Herm.] (Harms, 1970), p. 408
J. bufonius L., toad rush, p. 408
var. bufonius
J. canadensis Gay ex Laharpe, p. 412
var. canadensis
J. debilis A. Gray, p. 414
J. diffusissimus Buckley, slimpod rush, p. 414
J. dudleyi Wieg., p. 410
J. effusus L., soft rush, bog rush, p. 406
ssp. solutus (Fern. & Wieg.) Hämet-Ahti [S, M: var. *solutus* Fern. & Wieg.] (Hämet-Ahti, 1980a)
***♦J. gerardii** Loisel (Mühlenbach, 1979)
J. interior Wieg., inland rush, p. 410

Juncus marginatus Rostkov, grassleaf rush, p. 410
var. marginatus
var. setosus Cov. [G: *J. marginatus*] (Hermann, 1975)
J. nodatus Cov., stout rush, p. 414
J. nodosus L., knotted rush, p. 413
J. scirpoides Lam., p. 413
var. scirpoides
J. secundus P. Beauv., p. 408
J. subcaudatus (Engelm.) Cov. & S. F. Blake, p. 412
var. subcaudatus
J. tenuis Willd., path rush, p. 408
f. anthelatus (Wieg.) F. J. Herm.
f. discretiflorus (F. J. Herm.) Fern.
f. tenuis
J. torreyi Cov., p. 413
J. validus Cov., p. 412

LUZULA, wood rush

Luzula bulbosa (Alph. Wood) Rydb., wood rush [M: *L. multiflora* (Retz.) Lej. var. *multiflora*] (Nordenskiöld, 1951, 1956), p. 416

LEMNACEAE, duckweed family

LEMNA, duckweed

***Lemna aequinoctialis** Welw. (Landolt, 1986)
L. miniuscula Herter, least duckweed [S: *L. minima* Philippi ex Hegelm.; M: *L. minuta* Kunth] (Landolt, 1986), p. 389
L. minor L. lesser duckweed, p. 389
***L. obscura** (Austin) Daubs (Landolt, 1986)
L. perpusilla Torrey, duckweed, p. 389
L. trisulca L., star duckweed, p. 389
***L. turionifera** Landolt (Landolt, 1986)
L. valdiviana Philippi, duckweed, p. 389

S: Steyermark G: Great Plains Flora M: Mohlenbrock

SPIRODELA, big duckweed

Spirodela polyrhiza (L.) Schleiden, duckmeat, greater duckweed, big duckweed, p. 388

♦**S. punctata** (G. Meyer) C. Thompson [**S:** *S. oligorhiza* (Kurz) Hegelm.] (Landolt, 1986), p. 388

WOLFFIA, watermeal

Wolffia borealis (Engelm. ex Hegelm.) Landolt [**S, M:** *W. punctata* Griseb.; although *W. punctata* is a nomenclatural synonym of *W. brasiliensis*, it has been widely misapplied] (Landolt, 1986), p. 390

W. brasiliensis Wedd. [**S:** *W. papulifera* Thompson] (Landolt, 1986), p. 390

W. columbiana Karsten, p. 390

WOLFFIELLA

Wolffiella gladiata (Hegelm.) Hegelm. [**S:** *W. floridana* (J. D. Smith) Thompson] (Landolt, 1986), p. 390

LILIACEAE, lily family
[**S:** incl. AMARYLLIDACEAE;
see also AGAVACEAE, SMILACACEAE]

AGAVE (see MANFREDA–AGAVACEAE)

ALLIUM, onion, garlic, leek

***Allium burdickii** (Hanes) A. G. Jones, wild leek, ramps (Jones, 1979; Turner, 1984)

Allium canadense L., wild garlic, wild onion, p. 428
var. canadense
var. lavendulare (Bates) F. Ownbey & Aase [S: *A. mutabile* Michaux] (Ownbey and Aase, 1955)
var. mobilense (Regel) F. Ownbey [S: *A. mutabile* Michaux] (Ownbey and Aase, 1955)
♦**A. cepa** L., onion, p. 426
var. cepa
var. viviparum Metz
A. cernuum Roth, wild onion, nodding wild onion, p. 429
♦**A. sativum** L., garlic, p. 425
♦**A. schoenoprasum** L., chives, p. 428
A. stellatum Ker Gawler, wild onion, pink wild onion, p. 429
A. tricoccum Sol., wild leek, p. 425
♦**A. vineale** L., field garlic, p. 425
f. compactum (Thuill.) Asch.
f. vineale

AMIANTHIUM, fly poison

Amianthium muscitoxicum (Walter) A. Gray, fly poison, p. 420

ASPARAGUS, asparagus

♦**Asparagus officinalis** L., asparagus, p. 439

CAMASSIA, wild hyacinth

Camassia angusta (Engelm. & A. Gray) Blank., wild hyacinth [G: *C. scillioides* (Raf.) Cory] (Ranker and Schnabel, 1986), p. 435
C. scilloides (Raf.) Cory, wild hyacinth, p. 435
f. petersenii Steyerm.
f. scilloides
f. variegata Steyerm.

CONVALLARIA, lily of the valley

*♦**Convallaria majalis** L. (Churchill, 1986)

S: Steyermark G: Great Plains Flora M: Mohlenbrock

ERYTHRONIUM, dogtooth violet

Erythronium albidum Nutt., white dogtooth violet, white trout lily, p. 433

E. americanum Ker Gawler, yellow adder's tongue, yellow dogtooth violet, yellow trout lily, p. 433

ssp. americanum

E. mesochoreum Knerr, white dogtooth violet, white trout lily, prairie dogtooth violet [S: *Erythronium albidum* var. *mesochoreum* (Knerr) Rickett] (Robertson, 1966), p. 434

*E. **rostratum** W. Wolf, yellow adder's tongue, yellow dogtooth violet, yellow trout lily (Parks and Hardin, 1963; Robertson, 1966)

HEMEROCALLIS, day lily

♦**Hemerocallis fulva** (L.) L., orange day lily (note that S: mistakenly transferred this taxon to *H. lilio-asphodelus* L. (in his errata, p. 1726); this is the correct name for the yellow day lily, once called *H. flava* L., which is not known to escape from cultivation in Missouri), p. 430

var. fulva

var. kwanso Regel

HYMENOCALLIS, spider lily

Hymenocallis caroliniana (L.) Herbert, spider lily [S: *H. occidentalis* (Le Conte) Kunth] (Traub, 1962), p. 456

HYPOXIS, star grass

Hypoxis hirsuta (L.) Cov., yellow star grass, p. 457

f. hirsuta

f. villosissima Fern.

LEUCOJUM, snowflake

♦**Leucojum aestivum** L., snowflake, summer snowflake, p. 457

LILIUM, lily

♦**Lilium lancifolium** Thunb., tiger lily [**S:** *L. tigrinum* Ker Gawler] (Ingram, 1968), p. 432

L. michiganense Farw., Michigan lily, Turk's cap lily [**G:** *L. canadense* L. ssp. *michiganense* (Farw.) J. Boivin & Cody] (Voss, 1964), p. 432

MAIANTHEMUM, mayflower, false Solomon's seal [S, G, M: SMILACINA] (LaFrankie, 1986a, b)

Maianthemum racemosum (L.) Link, false Solomon's seal, false spikenard [**S, G, M:** *Smilacina racemosa* (L.) Desf.] (LaFrankie, 1986a, b), p. 440

ssp. racemosum [**S:** incl. var. *cylindrica* Fern.] (LaFrankie, 1986b)

M. stellatum (L.) Link, starry false Solomon's seal, spikenard [**S, G, M:** *Smilacina stellata* (L.) Desf.] (LaFrankie, 1986a, b), p. 440

MANFREDA (see AGAVACEAE)

MEDEOLA, cucumber root

Medeola virginiana L., Indian cucumber root, p. 443

MELANTHIUM, bunchflower

Melanthium virginicum L., bunchflower, p. 423

MUSCARI, grape hyacinth

♦**Muscari botryoides** (L.) Miller, grape hyacinth, p. 438

NARCISSUS, narcissus, daffodil

*♦*Narcissus* x *medioluteus* Miller, see named hybrids
♦**N. poeticus** L., poet's narcissus, p. 456
♦**N. pseudo-narcissus** L., daffodil, p. 456

NOTHOSCORDUM, false garlic

Nothoscordum bivalve (L.) Britton, false garlic, crow poison, p. 429

ORNITHOGALUM, star of Bethlehem

♦**Ornithogalum nutans** L., p. 438
♦**O. umbellatum** L., p. 438

POLYGONATUM, Solomon's seal

Polygonatum biflorum (Walter) Elliott, Solomon's Seal, p. 442
var. biflorum
var. commutatum (Schultes f.) Morong [S: *P. canaliculatum* (Muhlenb.) Pursh; G: *P. biflorum*; M: *P. commutatum* (Schultes f.) A. Dietr.] (Voss, 1972)

SCILLA, squill

♦**Scilla sibirica** Andrz., squill, Siberian squill, p. 436

SMILACINA (see MAIANTHEMUM)

SMILAX (see SMILACACEAE)

STENANTHIUM

Stenanthium gramineum (Ker Gawler) Morong, featherbells. p. 420
var. gramineum

S: Steyermark G: Great Plains Flora M: Mohlenbrock

TRILLIUM, trillium, wake robin

Trillium flexipes Raf., white trillium, white wake robin, drooping trillium [G: *T. gleasonii* Fern.] (Fernald, 1944), p. 447
f. flexipes
T. nivale Riddell, snow trillium, dwarf white trillium, p. 447
T. pusillum Michaux, Ozark wake robin, p. 448
var. ozarkanum (E. J. Palmer & Steyerm.) Steyerm.
T. recurvatum Beck, purple trillium, bloody butcher, purple wake robin [S: incl. f. *foliosum* Steyerm., f. *petaloideum* Steyerm.] (Freeman, 1975), p. 446
f. recurvatum
f. shayi E. J. Palmer & Steyerm.
T. sessile L., wake robin, toadshade, p. 444
f. sessile
f. viridiflorum Beyer [M: *T. sessile*] (Freeman, 1975)
T. viride Beck, green trillium, p. 444
T. viridescens Nutt., green trillium [S: *T. viride*] (Freeman, 1975), p. 444

UVULARIA, bellwort

Uvularia grandiflora Smith, large bellwort, bellwort, p. 424
U. sessilifolia L., small bellwort, p. 424

VERATRUM, false hellebore

Veratrum woodii Robb., false hellebore, p. 423

YUCCA (see AGAVACEAE)

ZIGADENUS, death camas

Zigadenus elegans Pursh, white camas, p. 422
Z. nuttallii A. Gray ex S. Watson, death camas, p. 422

MARANTACEAE, arrowroot family

THALIA

Thalia dealbata Roscoe, thalia, p. 468

NAJADACEAE, naiad family
(see also POTAMOGETONACEAE, RUPPIACEAE, ZANNICHELLIACEAE)

NAJAS, naiad

Najas flexilis (Willd.) Rostkov & F. W. Schmidt, p. 57
N. **gracillima** (A. Braun ex Engelm.) Magnus, p. 57
N. **guadalupensis** (Sprengel) Magnus, p. 57
var. guadalupensis

ORCHIDACEAE, orchid family

APLECTRUM, putty root, Adam and Eve orchid

Aplectrum hyemale (Muhlenb. ex Willd.) Torrey, putty root, Adam and Eve orchid, p. 486
f. hyemale

CALOPOGON, grass pink

Calopogon tuberosus (L.) Britton, Sterns & Pogg., grass pink
[S: *C. pulchellus* (Salisb.) R. Br. var. *pulchellus*]
(Mackenzie, 1925; Voss, 1966), p. 478
var. tuberosus

CORALLORHIZA, coral root

Corallorhiza odontorhiza (Willd.) Nutt., late coral root, p. 485
f. odontorhiza
C. trifida Châtel., early coral root, pale coral root, p. 484
var. verna (Nutt.) Fern.
C. wisteriana Conrad, coral root, p. 484

CYPRIPEDIUM, lady's slipper

Cypripedium calceolus L., yellow lady's slipper, p. 470
var. parviflorum (Salisb.) Fern., small yellow lady's slipper [M: *C. parviflorum* Salisb.] (Luer, 1975; Sheviak, 1974)
var. pubescens (Willd.) Correll, large yellow Lady's slipper [M: *C. pubescens* Willd.] (Luer, 1975; Sheviak, 1974)
C. candidum Muhlenb. ex Willd., small white lady's slipper, p. 472
C. reginae Walter, showy lady's slipper, p. 472

EPIPACTIS, helleborine

♦**Epipactis helleborine** (L.) Crantz, helleborine, p. 478

GALEARIS, orchis
[S: ORCHIS] (Luer, 1975)

Galearis spectabilis (L.) Raf., showy orchis [S: *Orchis spectabilis* L.] (Luer, 1975), p. 472

GOODYERA, rattlesnake plantain

Goodyera pubescens (Willd.) R. Br., rattlesnake plantain, p. 484

HABENARIA (see PLATANTHERA)

HEXALECTRIS, crested coral root

Hexalectris spicata (Walter) Barnhart, crested coral root, p. 488

ISOTRIA, whorled pogonia

Isotria medeoloides (Pursh) Raf., small whorled pogonia, p. 478
I. verticillata (Muhlenb. ex Willd.) Raf., large whorled pogonia, p. 477

LIPARIS, twayblade

Liparis liliifolia (L.) Rich. ex Lindley, large twayblade, lily twayblade, p. 485
f. liliifolia
L. loeselii (L.) Rich., Loesel's twayblade, p. 486

MALAXIS, adder's mouth

Malaxis unifolia Michaux, green adder's mouth, p. 485
f. unifolia

ORCHIS (see GALEARIS)

PLATANTHERA, rein orchis, fringed orchid [S, G: HABENARIA] (Luer, 1975)

Platanthera ciliaris (L.) Lindley, yellow fringed orchid [S: *Habenaria ciliaris* (L.) R. Br.] (Luer, 1975), p. 474
P. clavellata (Michaux) Luer, green wood orchid [S: *H. clavellata* (Michaux) Sprengel var. *clavellata*; G: *H. clavellata*] (Luer, 1975), p. 473
P. flava (L.) Lindley, pale green orchid, tubercled orchid [S: *H. flava* (L.) R. Br.] (Luer, 1975), p. 474
var. flava
var. herbiola (R. Br.) Luer [S: *H. flava* var. *herbiola* (R. Br.) Ames & Correll] (Luer, 1975)

Platanthera lacera (Michaux) G. Don, ragged orchis, ragged orchid [S, G: *H. lacera* (Michaux) Lodd.] (Luer, 1975), p. 476
var. lacera
P. leucophaea (Nutt.) Lindley, eastern prairie fringed orchid [S, G: *H. leucophaea* (Nutt.) A. Gray] (Luer, 1975), p. 476
P. peramoena (A. Gray) A. Gray, purple fringeless orchid [S: *H. peramoena* A. Gray] (Luer, 1975), p. 476
***P. praeclara** Sheviak & Bowles, western prairie fringed orchid (Sheviak and Bowles, 1986)
P. psycodes (L.) Lindley, small purple fringed orchid [S: *H. psycodes* (L.) Sprengel] (Luer, 1975), p. 476

POGONIA, snake mouth, pogonia

Pogonia ophioglossoides (L.) Ker Gawler, rose pogonia, snake mouth, p. 477
f. ophioglossoides

SPIRANTHES, ladies' tresses

Spiranthes cernua (L.) Rich., common ladies' tresses, nodding ladies' tresses, p. 480
S. lacera (Raf.) Raf., slender ladies' tresses, p. 480
var. gracilis (Bigelow) Luer [S, M: *S. gracilis* (Bigelow) Beck] (Luer, 1975)
var. lacera
S. lucida (H. Eaton) Ames, shining ladies' tresses, yellow-lipped ladies' tresses, p. 482
***S. magnicamporum** Sheviak, Great Plains ladies' tresses (Sheviak, 1973, 1982)
S. ochroleuca (Rydb.) Rydb. [S: *S. cernua* (L.) Richard var. *ochroleuca* (Rydb.) Ames], see excluded taxa
S. ovalis Lindley, oval ladies' tresses, p. 482
***var. erostellata** Catling (Catling, 1983)
S. tuberosa Raf., little ladies' tresses, p. 479
S. vernalis Engelm. & A. Gray, spring ladies' tresses, twisted ladies' tresses, p. 480

S: Steyermark G: Great Plains Flora M: Mohlenbrock

TIPULARIA

***Tipularia discolor** (Pursh) Nutt., cranefly orchid (Pelton, 1989)

TRIPHORA, nodding pogonia

Triphora trianthophora (Sw.) Rydb., three bird orchid, nodding pogonia, p. 478

POACEAE (GRAMINEAE), grass family

AEGILOPS (see TRITICUM)

AGROPYRON, wheat grass (see also ELYMUS)

***Agropyron desertorum** (Fischer ex Link) Schultes, standard wheatgrass (Mühlenbach, 1979)

AGROSTIS, bent grass (see also APERA)

Agrostis elliottiana Schultes, awned bent grass, p. 148

♦A. gigantea Roth, redtop [**S, M:** *A. alba* L.; **G:** *A. stolonifera* L. var. *major* (Gaudin) Farw.] (Philipson, 1937; Widén, 1971), p. 146

A. hyemalis (Walter) Britton, Sterns & Pogg., hair grass, tickle grass, winter bent grass, p. 148

var. hyemalis

A. perennans (Walter) Tuckerman, upland bent [**M:** *A. clavata* Trin.] (Björkman, 1960), p. 148

var. aestivalis Vasey

var. perennans

A. stolonifera L., creeping bent, p. 146

var. palustris (Hudson) Farw. [**S:** *A. alba*; **M:** *A. alba* var. *palustris* (Hudson) Pers.] (Philipson, 1937)

♦A. tenuis Sibth., Rhode Island bent [**M:** *A. capillaris* L.] (Philipson, 1937), p. 148

AIRA, hairgrass

*♦**Aira caryophyllea** L., silver hairgrass (Castaner, 1982b; Dunn, 1982)
♦**A. elegantissima** Schur, hairgrass [S: *A. elegans* Willd. ex Gaudin] (Kerguélen, 1975), p. 139

ALOPECURUS, foxtail

Alopecurus aequalis Sobol., floating foxtail, short-awn foxtail, p. 152
A. carolinianus Walter, common foxtail, Carolina foxtail, p. 152
A. pratensis L., meadow foxtail, p. 152

ANDROPOGON, beard grass (see also BOTHRIOCHLOA, SCHIZACHYRIUM)

Andropogon elliottii Chapman, Elliott's broomsedge, p. 247
A. gerardii Vitman, big bluestem, p. 246
var. chrysocomus (Nash) Fern.
var. gerardii
A. ternarius Michaux, splitbeard bluestem, p. 246
A. virginicus L., broomsedge, p. 247
var. virginicus

ANTHOXANTHUM, vernal grass

♦**Anthoxanthum odoratum** L., sweet vernal grass, p. 186

APERA, silky bent grass [S: AGROSTIS] (McNeill, 1981)

♦**Apera interrupta** (L.) P. Beauv., Italian windgrass [S: *Agrostis interrupta* L.] (McNeill, 1981), p. 146
♦**A. spica-venti** (L.) P. Beauv., loose silky bent [S: *Agrostis spica-venti* L.] (McNeill, 1981), p. 146

ARISTIDA, three-awn

Aristida adscensionis L., sixweeks three-awn, p. 172
A. basiramea Engelm. ex Vasey, forktip three-awn, p. 171
A. dichotoma Michaux, churchmouse three-awn, p. 171
  var. curtissii A. Gray [**G:** *A. basiramea* var. *curtissii* (A. Gray) Shinn.; **M:** *A. curtisii* (A. Gray) Nash] (Allred, 1986)
  var. dichotoma
A. lanosa Muhlenb. ex Elliott, woollyleaf three-awn, p. 174
A. longespica Poiret, slimspike three-awn, p. 172
  var. geniculata (Raf.) Fern. [**S:** incl. *A. intermedia* Scribner & C. Ball; **M:** *A. glauca* (Nees) Walp.] (Shinners, 1954; Allred, 1985)
  var. longespica
A. oligantha Michaux, prairie three-awn, old field three-awn, p. 172
A. purpurascens Poiret, arrowfeather, p. 174
A. ramosissima Engelm. ex A. Gray, slender three-awn, s-curve three-awn, p. 172

ARRHENATHERUM, oat grass

♦**Arrhenatherum elatius** (L.) J. S. & C. Presl, tall oat grass, p. 140
  ssp. elatius

ARTHRAXON

♦**Arthraxon hispidus** (Thunb.) Makino, p. 242
  var. hispidus [incl. var. *cryptatherus* (Hackel) Honda] (Kiger, 1971; Christ, 1988a)

ARUNDINARIA, cane

Arundinaria gigantea (Walter) Muhlenb., giant cane, p. 81

ARUNDO, giant reed

♦**Arundo donax** L., giant reed, p. 116

AVENA, oat

♦**Avena fatua** L., p. 140
var. fatua, wild oat
var. sativa (L.) Hausskn., oat [**S, M:** *A. sativa* L.] (Haussknecht, 1985)

BECKMANNIA, sloughgrass

♦**Beckmannia syzigachne** (Steudel) Fern., American sloughgrass, p. 179

BOTHRIOCHLOA, bluestem
[S, G: ANDROPOGON] (Gould, 1967)

*♦**Bothriochloa bladhii** (Retz.) S. T. Blake, Caucasian bluestem [**G:** *Andropogon bladhii* Retz.] (Dunn, 1982; Gould, 1975)
B. saccharoides (Sw.) Rydb., silver bluestem, silver beardgrass, p. 248
ssp. torreyana (Steudel) Allred & Gould [**S:** *Andropogon saccharoides* Sw.; **G:** *A. saccharoides* var. *torreyanus* (Steudel) Hackel; **M:** *B. saccharoides*] (Allred and Gould, 1983)

BOUTELOUA, grama grass

Bouteloua curtipendula (Michaux) Torrey, sideoats grama, p. 182
var. curtipendula
B. gracilis (Humb., Bonpl. & Kunth) Lagasca ex Steudel, blue grama, p. 184
B. hirsuta Lagasca, hairy grama, p. 184
var. hirsuta

BRACHIARIA, signalgrass

♦**Brachiaria eruciformis** (Smith) Griseb., p. 198
♦**B. platyphylla** (Griseb.) Nash, fringed signalgrass, p. 198
♦**B. texana** (Buckley) S. T. Blake, Texas panic grass, Texas millet, [S, G: *Panicum texanum* Buckley] (Blake, 1969), p. 225

BRACHYELYTRUM

Brachyelytrum erectum (Roth) P. Beauv., p. 168
var. erectum

BROMUS, brome grass

*♦**Bromus arvensis** L., field brome (Mühlenbach, 1983)
♦**B. catharticus** M. Vahl, rescue grass, p. 84
*♦**B. commutatus** Schrader (Gereau, 1987)
♦**B. diandrus** Roth, ripgut grass [S: *B. rigidus* Roth] (Gould, 1975), p. 88
♦**B. hordeaceus** L., soft chess, soft brome, bald brome [S, G: *B. mollis* L.] (Smith, 1968), p. 86
ssp. hordeaceus
♦**B. inermis** Leysser, smooth brome, p. 84
ssp. inermis
♦**B. japonicus** Thunb. ex Murray, Japanese chess, Japanese brome, p. 86
B. latiglumis (Shear) A. Hitchc. [M: *B. purgans* L.] (Wagnon, 1952), p. 86
B. pubescens Muhlenb. ex Willd., Canada brome [S: *B. purgans* L.] (Wagnon, 1952), p. 84
♦**B. racemosus** L., hairy chess [G: *B. mollis*] (Seymour, 1966). p. 86
♦**B. secalinus** L., rye brome, cheat, chess, p. 86
♦**B. squarrosus** L., chess, p. 86
♦**B. sterilis** L., p. 88
♦**B. tectorum** L., downy chess, downy brome, p. 88
var. tectorum

S: Steyermark G: Great Plains Flora M: Mohlenbrock

BUCHLOE, buffalo grass

Buchloe dactyloides (Nutt.) Engelm., buffalo grass, p. 184

CALAMAGROSTIS, reed bent grass

Calamagrostis canadensis (Michaux) P. Beauv., bluejoint, p. 144
var. canadensis
var. macouniana (Vasey) Stebb.
C. insperata Swallen, p. 145
C. **stricta** (Timm.) Koeler, northern reedgrass [S: *C. inexpansa* A. Gray] (Sutherland, 1986), p. 145
var. brevior Vasey

CALAMOVILFA, sand reed

Calamovilfa longifolia (Hook.) Scribner, long-leaved reed grass, sand reed grass, p. 145
var. longifolia

CENCHRUS, sandbur

Cenchrus longispinus (Hackel) Fern., sandbur, p. 240

CHASMANTHIUM, spike grass [S: UNIOLA] (Yates, 1966)

Chasmanthium latifolium (Michaux) Yates, sea oats, wild oats, broadleaf spike grass [S: *Uniola latifolia* Michaux] (Yates, 1966), p. 115
C. **laxum** (L.) Yates [S: *Uniola laxa* (L.) Britton. Sterns & Pogg.] (Yates, 1966), p. 115
ssp. laxum
***ssp. sessiliflorum** (Poiret) [*C. sessiliflorum* (Poiret) Yates] (Yates, 1966; Clark, 1990)

S: Steyermark G: Great Plains Flora M: Mohlenbrock

CHLORIS, windmill grass

Chloris verticillata Nutt., windmill grass, p. 182
♦**C. virgata** Sw., feather finger grass, showy chloris, p. 180

CINNA, wood reed

Cinna arundinacea L., wood reed, wood reed grass, p. 150
var. arundinacea
var. inexpansa Fern. & Griscom

COELORACHIS, joint grass [S: MANISURIS] (Clayton, 1966)

Coelorachis cylindrica (Michaux) Nash, joint grass [S, G: *Manisuris cylindrica* (Michaux) Kuntze] (Clayton, 1966), p. 252

CRYPSIS [S: HELEOCHLOA] (Hammel and Reeder, 1979)

♦**Crypsis schoenoides** (L.) Lam. [S: *Heleochloa schoenoides* (L.) Host] (Hammel and Reeder, 1979), p. 168

CYNODON, Bermuda grass

♦**Cynodon dactylon** (L.) Pers., Bermuda grass, p. 177

CYNOSURUS

♦**Cynosurus echinatus** L., p. 1652

DACTYLIS, orchard grass

♦**Dactylis glomerata** L., orchard grass, p. 115

DANTHONIA, wild oat grass

Danthonia spicata (L.) P. Beauv. ex Roemer & Schultes, poverty grass, curly oat grass, p. 142
var. longipila Scribner & Merrill
var. spicata

DIARRHENA, beakgrain

Diarrhena americana P. Beauv., American beakgrain, p. 113
var. americana
var. obovata Gleason

DICHANTHELIUM, panic grass
[S: PANICUM] (Gould, 1974)

(Note that there is current controversy concerning *Dichanthelium*, both as to whether this group of species should be segregated from the related *Panicum* at the generic level and how the various morphological entities should be combined into species and varieties; we have chosen provisionally to follow Gould and Clark's (1978) monograph of the group for both the generic separation and the rather conservative species concepts; see Lelong (1986) and Webster (1988) for different opinions.)

Dichanthelium acuminatum (Sw.) Gould & C. A. Clark, p. 214
var. acuminatum [S: *Panicum lanuginosum* Elliott var. *fasciculatum* (Torrey) Fern., var. *implicatum* (Scribner) Fern., var. *lindheimeri* (Nash) Fern., *P. subvillosum* Ashe; G, M: *D. acuminatum* var. *lindheimeri* (Nash) Gould & C. A. Clark] (Gould and Clark, 1978; Stephenson, 1984)
var. longiligulatum (Nash) Gould & C. A. Clark [S: *Panicum longiligulatum* Nash] (Gould and Clark, 1978)

(*Dichanthelium acuminatum*, continued)

var. villosum (A. Gray) Gould & C. A. Clark [**S:** *Panicum praecocius* A. Hitchc. & Chase, *P. villosissimum* Nash, incl. var. *pseudopubescens* (Nash) Fern.; **M:** *D. villosissimum* (Nash) Freckmann, incl. var. *praecocius* (A. Hitchc. & Chase) Freckman] (Gould and Clark, 1978)

D. boreale (Nash) Freckmann [**S:** *Panicum bicknellii* Nash, *P. calliphyllum* Ashe] (Freckmann, 1978), pp. 212, 213

D. boscii (Poiret) Gould & C. A. Clark [**S:** *Panicum boscii* Poiret, incl. var. *molle* (Vasey) A. Hitchc. & Chase] (Gould and Clark, 1978), p. 224

D. clandestinum (L.) Gould [**S:** *Panicum clandestinum* L.] (Gould, 1974), p. 222

D. commutatum (Schultes) Gould [**S:** *Panicum commutatum* Schultes, incl. var. *ashei* (G. Pearson ex Ashe) Fern.; **M:** *D. commutatum* var. *ashei* (G. Pearson ex Ashe) Mohl.] (Gould, 1974; Gould and Clark, 1978), p. 221

D. depauperatum (Muhlenb.) Gould [**S:** *Panicum depauperatum* Muhlenb.] (Gould, 1974), p. 211

D. dichotomum (L.) Gould, p. 213

var. dichotomum [**S:** *Panicum annulum* Ashe, *P. dichotomum* L., incl. var. *barbulatum* (Michaux) Wood, *P. microcarpon* Muhlenb. ex Elliott, *P. nitidum* Lam.; **M:** *D. microcarpon* (Muhlenb. ex Elliott) Mohl., *D. nitidum* (Lam.) Mohl.] (Gould and Clark, 1978)

D. latifolium (L.) Gould & C. A. Clark [**S:** *Panicum latifolium* L.] (Gould and Clark, 1978), p. 222

D. laxiflorum (Lam.) Gould [**S:** *Panicum laxiflorum* Lam.] (Gould, 1974), p. 212

D. leibergii (Vasey) Freckmann [**S:** *Panicum leibergii* (Vasey) Scribner] (Freckmann, 1978), p. 221

D. linearifolium (Scribner) Gould [**S:** *Panicum linearifolium* Scribner, incl. var. *werneri* (Scribner) Fern., *P. perlongum* Nash; **M:** *D. perlongum* (Nash) Freckmann, *D. linearifolium* var. *werneri* (Scribner) Mohl.] (Gould, 1974; Gould and Clark, 1978), p. 212

D. malacophyllum (Nash) Gould [**S:** *Panicum malacophyllum* Nash] (Gould, 1974), p. 220

Dichanthelium oligosanthes (Schultes) Gould, p. 220
var. oligosanthes [S: *Panicum oligosanthes* Schultes var. *oligosanthes*] (Gould, 1974)
var. scribnerianum (Nash) Gould [S: *Panicum oligosanthes* var. *helleri* (Nash) Fern., var. *scribnerianum* (Nash) Fern.; M: *D. oligosanthes* var. *helleri* (Nash) Mohl.] (Gould, 1974; Gould and Clark, 1978)
D. ravenelii (Scribner & Merr.) Gould [S: *Panicum ravenelii* Scribner & Merr.] (Gould, 1974), p. 221
***D. sabulorum** (Lam.) Gould & C. A. Clark, p. 232
var. thinium (A. Hitchc. & Chase) Gould & C. A. Clark [S: *P. columbianum* Scribner] (Gould and Clark, 1978; Nelson, 1982)
D. scoparium (Lam.) Gould [S: *Panicum scoparium* Lam.] (Gould, 1974), p. 221
D. sphaerocarpon (Elliott) Gould, p. 218
var. isophyllum (Scribner) Gould & C. A. Clark [S: *Panicum polyanthes* Schultes, M: *D. polyanthes* (Schultes) Mohl.] (Gould and Clark, 1978)
var. sphaerocarpon [S: *Panicum sphaerocarpon* Elliott, incl. var. *inflatum* (Scribner & J. G. Smith) A. Hitchc. & Chase] (Gould, 1974)

DIGITARIA, crab grass
[S: incl. LEPTOLOMA] (Veldkamp, 1973)

♦**Digitaria ciliaris** (Retz.) Koeler, crab grass, southern crab grass [S: *D. sanguinalis* (L.) Scop. var. *ciliaris* (Retz.) Parl.] (Gould, 1963; Webster, 1987), p. 194
D. cognata (Schultes) Pilger, fall witch grass [S, G, M: *Leptoloma cognatum* (Schultes) Chase] (Veldkamp, 1973), p. 197
var. cognata
D. filiformis (L.) Koeler, slender crab grass, p. 196
var. filiformis
var. villosa (Walter) Fern., hairy finger grass [G: *D. filiformis*; M: *D. villosa* (Walter) Persoon] (the relationship of this taxon, which is often treated as a separate species, to *D. filiformis* has not been studied in detail)

♦**Digitaria ischaemum** (Schreber) Schreber ex Muhlenb., smooth crab grass, p. 194
var. ischaemum
var. mississippiensis (Gattinger) Fern.
♦**D. sanguinalis** (L.) Scop., crab grass, hairy crab grass, p. 194

DIPLACHNE (see LEPTOCHLOA)

DISTICHLIS, salt grass

Distichlis spicata (L.) E. Greene, salt grass, p. 114
var. spicata
♦**var. stricta** (Torrey) Scribner [S, M: *D. stricta* (Torrey) Rydb.] (Beetle, 1943)

ECHINOCHLOA, barnyard grass

♦**Echinochloa colonum** (L.) Link, jungle rice, p. 233
♦**E. crusgalli** (L.) P. Beauv., barnyard grass, p. 233
var. crusgalli
var. frumentacea (Link) W. Wight
E. muricata (P. Beauv.) Fern., barnyard grass, p. 234
var. microstachya Wieg. [S: incl. var. *occidentalis* Wieg., M: incl. var. *wiegandii* Fassett (Fassett never actually published this combination)] (Gould et al., 1972)
var. muricata [S: incl. var. *ludoviciana* Wieg.] (Gould et al., 1972)
*♦**E. utilis** Ohwi & Yab. (Mühlenbach, 1983)

ELEUSINE, goose grass

♦**Eleusine indica** (L.) Gaertner, goose grass, yard grass, p. 177

ELYMUS, wild rye
[S, G: incl. native AGROPYRON, HYSTRIX, SITANION; M: incl. native AGROPYRON, SITANION]
(Estes and Tyrl, 1982; Arnow, 1987)

Elymus canadensis L., Canada wild rye, p. 130
var. canadensis [S, M: incl. *E. villosus* Muhlenb. f. *arkansanus* (Scribner & C. Ball) Fern., f. *villosus*; G: incl. *E. villosus*] (Gould, 1975) (note that the infraspecific taxonomy of this species requires further study)
E. diversiglumis Scribner & C. Ball [S: *E. interruptus* Buckley] (Church, 1967), p. 128
*♦**E. elongatus** (Host) Runem. [*Agropyron elongatum* (Host) P. Beauv.] (Mühlenbach, 1979; Arnow, 1987)
E. glaucus Buckley, blue wild rye, p. 128
E. hystrix L.. bottlebrush grass [S, G: *Hystrix patula* Moench] (Gould, 1947; Bowden, 1964), p. 132
f. bigelovianus (Fern.) Dore [S: *Hystrix patula* f. *bigeloviana* (Fern.) Gleason; M: *E. hystrix* var. *bigeloviana* (Fern.) Bowden] (Gould, 1947; Bowden, 1964; McNeill and Dore, 1976)
f. hystrix
♦**E. longifolius** (J. G. Smith) Gould, squirreltail [S: *Sitanion longifolium* J. G. Smith; G: *S. hystrix* (Nutt.) J. G. Smith var. *brevifolium* (J. G. Smith) C. Hitchc.; M: *S. hystrix* (Nutt.) J. G. Smith] (Gould, 1974), p. 132
♦**E. repens** (L.) Gould, quack grass [S: *Agropyron repens* (L.) P. Beauv. var. *subulatum* (Schreber) Reichb. f. *subulatum*, *A. repens* var. *subulatum* f. *vaillantianum* (Wulfen) Fern.; G: *A. repens*; M: *A. repens* f. *aristatum* (Schumann) Holmb., *A. repens* f. *repens*] (Gould, 1947), p. 122
E. riparius Wieg., p. 130
E. smithii (Rydb.) Gould, western wheat grass [S, G: *Agropyron smithii* Rydb.; M: *A. smithii*, incl. var. *molle* (Scribner & J. G. Smith) M. E. Jones] (Gould, 1947), p. 124

S: Steyermark G: Great Plains Flora M: Mohlenbrock

♦**Elymus trachycaulus** (Link) Gould ex Shinn., bearded wheat grass, awned wheat grass, slender wheat grass [S: *Agropyron trachycaulum* (Link) Malte var. *glaucum* (Pease & A. Moore) Malte, *A. trachycaulum* var. *trachycaulum*; G: *A. caninum* (L.) P. Beauv. ssp. *majus* (Vasey) C. Hitchc.; M: *A. trachycaulum* var. *trachycaulum*] (Shinners, 1954), p. 124

E. virginicus L., wild rye, p. 130

var. glabriflorus (Vasey) Bush

f. australis (Scribner & C. Ball) Fern.

f. glabriflorus

var. submuticus Hooker

var. virginicus [S: incl. var. *jejeunus* (Ramaley) Bush] (Bowden, 1964)

f. hirsutiglumis (Scribner) Fern.

f. virginicus

ERAGROSTIS, love grass

*♦**Eragrostis barrelieri** Daveau, Mediterranean love grass (Mühlenbach, 1979)

E. capillaris (L.) Nees, lace grass, p. 106

♦**E. cilianensis** (All.) Vign. ex Janchen, stink grass, p. 108

*♦**E. curtipedicellata** Buckley, gummy love grass (Mühlenbach, 1979)

♦**E. curvula** (Schrader) Nees, weeping love grass, p. 112

*♦**E. elliottii** S. Watson, Elliott love grass (Mühlenbach, 1979)

E. frankii Steudel, sandbar love grass, p. 107

var. frankii

E. glomerata (Walter) L. Dewey, p. 106

E. hirsuta (Michaux) Nees, p. 108

var. hirsuta

E. hypnoides (Lam.) Britton, Sterns & Pogg., creeping love grass, pony grass, p. 106

E. intermedia A. Hitchc., plains love grass, p. 110

♦**E. minor** Host, little love grass [S: *E. poaeoides* P. Beauv. ex Roemer & Schultes] (Koch, 1978), p. 108

*♦**E. multicaulis** Steudel (Mühlenbach, 1979)

Eragrostis pectinacea (Michaux) Nees, Carolina love grass, p. 107
var. pectinacea
var. miserrima (Fourn.) J. Reeder [**S:** *E. arida* A. Hitchc.] (Reeder, 1986)
♦**E. pilosa** (L.) P. Beauv., India love grass, p. 107
var. pilosa
E. reptans (Michaux) Nees, creeping love grass, pony grass, p. 106
*♦**E. secundiflora** C. Presl, red love grass
ssp. oxylepis (Torrey) S. Koch [*E. oxylepis* (Torrey) Torrey] (Koch, 1978; Mühlenbach, 1979)
E. spectabilis (Pursh) Steudel, purple love grass [**S:** incl. var. *sparsihirsuta* Farw.] (Hitchcock, 1950), p. 110
E. trichodes (Nutt.) Alph. Wood, sand love grass, thread love grass, p. 110

ERIANTHUS, plume grass

Erianthus alopecuroides (L.) Elliott, silver plume grass, p. 242
♦**E. ravennae** (L.) P. Beauv., ravenna grass, plume grass, p. 242
E. strictus Baldwin, narrow plume grass, p. 241

ERIOCHLOA, cup grass

♦**Eriochloa acuminata** (C. Presl) Kunth, cup grass, p. 197
var. acuminata [**S:** *E. gracilis* (Fourn.) A. Hitchc. var. *gracilis*; **M:** *E. lemmonii* Vasey & Scribner var. *gracilis* (Fourn.) Gould] (Shaw and Webster, 1987)
♦**E. contracta** A. Hitchc., prairie cup grass, p. 197
*♦**E. villosa** (Thunb.) Kunth (Dierker, 1989; Yatskievych and Figg, 1989)

FESTUCA, fescue (see also VULPIA)

♦**Festuca arundinacea** Schreber, tall fescue [**S:** *F. elatior* L. var. *arundinacea* (Schreber) Wimmer] (Lorenzoni, 1966), p. 92
♦**F. longifolia** Thuill., sheep fescue [**S:** *F. ovina* var. *duriuscula* (L.) Koch; **M:** *F. duriuscula* L.] (McNeill and Dore, 1976), p. 93
♦**F. ovina** L., sheep fescue, p. 93
F. paradoxa Desv., cluster fescue, p. 93
♦**F. pratensis** Hudson, meadow fescue [**S:** *F. elatior* L. var. *elatior* f. *elatior*, *F. elatior* var. *elatior* f. *aristata* Holmb.] (Lorenzoni, 1966; Terrell, 1967), p. 92
♦**F. rubra** L., red fescue, p. 93
var. arenaria (Osbeck) Fries
var. commutata Gaudin
var. rubra
F. subverticillata (Pers.) E. Aleks., nodding fescue [**S, G, M:** *F. obtusa* Biehler] (Alexeev, 1980), p. 92

GLYCERIA, manna grass (see also PUCCINELLIA)

Glyceria acutiflora Torrey, p. 96
G. septentrionalis A. Hitchc., eastern manna grass, floating manna grass, p. 96
var. arkansana (Fern.) Steyerm. & Kucera [**M:** *G. arkansana* Fern.] (Gould, 1975)
var. septentrionalis
G. striata (Lam.) A. Hitchc., fowl meadow grass, fowl manna grass, p. 96
var. striata
var. stricta (Scribner) Fern.

GYMNOPOGON, beard grass, skeleton grass

Gymnopogon ambiguus (Michaux) Britton, Sterns & Pogg., beard grass, bearded skeleton grass, p. 180

HELEOCHLOA (see CRYPSIS)

HOLCUS, velvet grass

♦**Holcus lanatus** L., velvet grass, p. 142

HORDEUM, barley

♦*Hordeum* x *caespitosum* Scribner, see named hybrids
♦**H. jubatum** L., squirreltail, foxtail barley, p. 132
♦**H. pusillum** Nutt., little barley, p. 133
♦**H. vulgare** L., barley, p. 133
var. trifurcatum (Schldl.) Alef., beardless barley, pearl barley
var. vulgare

HYSTRIX (see ELYMUS)

KOELERIA, June grass

Koeleria pyramidata (Lam.) P. Beauv., June grass [**S:** *K. cristata* (L.) Pers.; **M:** *K. macrantha* (Ledeb.) Sprengel] (Greuter, 1968), p. 136

LEERSIA, cutgrass, white grass

Leersia lenticularis Michaux, catchfly grass, p. 192
L. oryzoides (L.) Sw., rice cutgrass [**S:** incl. f. *inclusa* (Wiesb.) Doerfler] (Pyrah, 1969), p. 192
L. virginica Willd., white grass, p. 192

LEPTOCHLOA, feather grass, sprangletop [S: incl. DIPLACHNE] (McVaugh, 1983)

*♦**Leptochloa dubia** (Kunth) Nees, green sprangletop (Mühlenbach, 1979)

L. fascicularis (Lam.) A. Gray, bearded sprangletop [S: *Diplachne acuminata* Nash, *D. fascicularis* (Lam.) P. Beauv.] (Hitchcock, 1950; McVaugh, 1983), p. 113

L. filiformis (Lam.) P. Beauv., red sprangletop, p. 176

L. panicoides (C. Presl) A. Hitchc., Amazon sprangletop [S: *Diplachne halei* Nash] (Hitchcock, 1950; McVaugh, 1983), p. 113

LEPTOLOMA (see DIGITARIA)

LOLIUM, rye grass

♦**Lolium perenne** L., perennial rye grass, English rye grass [S: incl. *L. multiflorum* Lam. var. *diminutum* Mutel, *L. multiflorum* var. *multiflorum*; G: incl. var. *aristatum* Willd.; M: incl. *L. multiflorum*] (Gould, 1975), p. 134

*♦**L. persicum** Boiss. & Hohen. (Mühlenbach, 1979)

*♦**L. rigidum** Gaudin (Mühlenbach, 1979)

♦**L. temulentum** L., darnel [S: incl. var. *macrochaeton* A. Braun] (Terrell, 1968) (note that although Mühlenbach (1979) suggested that this species should be excluded from the state's flora, collections not examined by that author verify its presence in the state), p. 136

MANISURIS (see COELORACHIS)

MELICA, melic grass

Melica nitens (Scribner) Nutt. ex Piper, three-flowered melic grass, Ladd's favorite, p. 118

MISCANTHUS

♦**Miscanthus floridulus** (Labill.) Warb. ex Schumann & Lauterb., eulalia, p. 241
*♦**M. sacchariflorus** (Maxim.) Hackel, plume grass (Gereau, 1987)
*♦**M. sinensis** Andersson, plume grass (Gereau, 1987)

MUHLENBERGIA, muhly

Muhlenbergia asperifolia (Nees & Meyen) Parodi, scratchgrass, p. 154
M. bushii R. Pohl [S: *M. brachyphylla* Bush f. *brachyphylla*] (Pohl, 1969), p. 156
M. capillaris (Lam.) Trin., hair grass, p. 161
var. capillaris
M. x *curtisetosa* (Scribner) Bush, see named hybrids
M. cuspidata (Torrey) Rydb., plains muhly, p. 154
M. frondosa (Poiret) Fern., nimble will, satin grass, wirestem muhly [S: *M. brachyphylla* Bush f. *aristata* E. J. Palmer & Steyerm., *M. sylvatica* (Torrey) Torrey var. *sylvatica* f. *attenuata* (Scribner) E. J. Palmer & Steyerm.] (Pohl, 1969), p. 156
f. commutata (Scribner) Fern.
f. frondosa
M. glabrifloris Scribner, inland muhly, p. 158
M. mexicana (L.) Trin., wirestem muhly, p. 158
f. ambigua (Torrey) Fern.
f. mexicana
M. racemosa (Michaux) Britton, Sterns & Pogg., marsh muhly, p. 155
M. schreberi J. Gmelin, nimble will, p. 160
M. sobolifera (Muhlenb.) Trin., rock muhly, p. 155
f. setigera (Scribner) Deam
f. sobolifera
M. sylvatica (Torrey) Torrey, forest muhly, p. 158
M. tenuiflora (Willd.) Britton, Sterns & Pogg., slender muhly, p. 155
var. tenuiflora

ORYZA, rice

♦**Oryza sativa** L., rice, p. 190

ORYZOPSIS, mountain rice, rice grass

Oryzopsis racemosa (Smith) A. Hitchc., black-seeded mountain rice, p. 168

PANICUM, panic grass (see also BRACHIARIA, DICHANTHELIUM, PASPALIDIUM)

Panicum anceps Michaux, beaked panic grass, p. 229
var. anceps
P. capillare L., common witchgrass [**S, M:** incl. var. *occidentale* Rydb.] (Gould, 1975), p. 226
P. dichotomiflorum Michaux, fall panic grass [**M:** incl. var. *geniculatum* (Alph. Wood) Fern.] (Hitchcock, 1950), p. 225
P. flexile (Gattinger) Scibner, wiry witchgrass, slender panic grass, p. 225
P. gattingeri Nash, p. 226
P. hians Elliott, p. 230
♦**P. miliaceum** L., broomcorn millet, proso millet, p. 228
♦**P. obtusum** Kunth, vine mesquite, p. 230
P. philadelphicum Trin., Philadelphia witchgrass, p. 226
var. philadelphicum
var. tuckermanii (Fern.) Steyerm. & Schmoll
P. rigidulum Bosc ex Nees, redtop panic grass [**S:** *P. agrostoides* Sprengel, *P. stipitatum* Nash; **M:** incl. *P. stipitatum*] (Gould, 1975), p. 229
P. virgatum L., switch grass, p. 228

PASPALIDIUM [S: PANICUM]
(Gould and Shaw, 1983; McVaugh, 1983)

♦**Paspalidium geminatum** (Forssk.) Stapf [S: *Panicum geminatum* Forssk.] (Gould and Shaw, 1983; McVaugh, 1983), p. 225

PASPALUM, bead grass

♦**Paspalum dilatatum** Poiret, dallis grass, water paspalum, p. 202
P. dissectum (L.) L., mudbank paspalum, p. 200
P. floridanum Michaux, Florida paspalum, p. 202
  var. floridanum
  var. glabratum Engelm. ex Vasey
P. fluitans (Elliott) Kunth, horsetail paspalum, water paspalum (note that this taxon may not prove to be distinct from the neotropical *P. repens* P. Bergius, with which it was combined in several older works (e.g., Chase, 1929), however, a detailed study has not been completed), p. 200
P. laeve Michaux, field paspalum, p. 202
  var. circulare (Nash) Fern.
  var. laeve
  var. pilosum Scribner
P. pubiflorum Rupr. ex Fourn., p. 200
  var. glabrum Vasey ex Scribner
P. setaceum Michaux, p. 201
  var. ciliatifolium (Michaux) Vasey [S, M: *P. ciliatifolium* Michaux var. *ciliatifolium*] (Banks, 1966)
  var. muhlenbergii (Nash) D. Banks [S, M: *P. ciliatifolium* var. *muhlenbergii* (Nash) Fern.] (Banks, 1966)
  var. setaceum
  var. stramineum (Nash) D. Banks [S, M: *P. bushii* Nash, *P. ciliatifolium* var. *stramineum* (Nash) Fern.] (Banks, 1966)
♦**P. urvillei** Steudel, Vasey grass, p. 1652

PENNISETUM, fountain grass

♦**Pennisetum ciliare** (L.) Link, buffel grass, p. 1652

PHALARIS, canary grass

Phalaris arundinacea L., reed canary grass, p. 188
♦**P. brachystachys** Link, shortspike canary grass, p. 188
♦**P. canariensis** L., canary grass, p. 188
P. caroliniana Walter, canary grass, May grass, p. 188

PHLEUM, timothy

♦**Phleum pratense** L., timothy, p. 153

PHRAGMITES, reed

Phragmites australis (Cav.) Trin. ex Steudel, reed [S: *P. communis* Trin. var. *berlandieri* (Fourn.) Fern.] (Clayton, 1968), p. 116

POA, bluegrass

♦**Poa annua** L., annual bluegrass, p. 98
♦**P. bulbosa** L., bulbous bluegrass, p. 102
P. chapmaniana Scribner, Chapman bluegrass, p. 98
♦**P. compressa** L., Canada bluegrass, p. 100
***P. interior** Rydb., inland bluegrass (T. Smith, 1988)
♦**P. palustris** L., fowl bluegrass, p. 103
♦**P. pratensis** L., Kentucky bluegrass, p. 100
P. sylvestris A. Gray, sylvan bluegrass, woodland bluegrass, p. 102
♦**P. trivialis** L., rough bluegrass, p. 102
P. wolfii Scribner, meadow bluegrass, p. 102

PUCCINELLIA, alkali grass

♦**Puccinellia distans** (Jacq.) Parl., p. 94
♦**P. nuttalliana** (Schultes) A. Hitchc., alkali grass [S: *P. airoides* (Nutt.) S. Watson & J. Coulter] (Holmgren and Holmgren, 1977), p. 94
P. pallida (Torrey) R. T. Clausen [S: *Glyceria pallida* (Torrey) Trin.] (Clausen, 1952)

SCHEDONNARDUS, tumblegrass

Schedonnardus paniculatus (Nutt.) Trel., tumblegrass, p. 179

SCHIZACHYRIUM, bluestem [S: ANDROPOGON] (Gould, 1967)

Schizachyrium scoparium (Michaux) Nash, little bluestem [S, G: *Andropogon scoparius* Michaux] (Gould, 1967), p. 243

SCLEROCHLOA, hardgrass

*♦**Sclerochloa dura** (L.) P. Beauv., hardgrass (Ladd, 1983)

SECALE, rye

♦**Secale cereale** L., rye, p. 126

SETARIA, foxtail grass

♦**Setaria faberi** F. Herm., nodding foxtail, Chinese foxtail, p. 238
♦**S. italica** (L.) P. Beauv., foxtail millet, common millet, p. 240
S. parviflora (Poiret) Kerguélen, yellow foxtail [S, G, M: *S. geniculata* (Lam.) P. Beauv.] (Kerguélen, 1987), p. 237
♦**S. pumila** (Poiret) Roemer & Schultes, yellow foxtail [S, G, M: *S. glauca* (L.) P. Beauv.] (Kerguélen, 1977), p. 237

♦**Setaria verticillata** (L.) P. Beauv., bristly foxtail, bur bristlegrass, p. 237
var. ambigua (Guss.) Parl.
var. verticillata
♦**S. viridis** (L.) P. Beauv., green foxtail, p. 238
var. viridis

SITANION (see ELYMUS)

SORGHASTRUM, Indian grass

Sorghastrum nutans (L.) Nash, Indian grass, p. 252

SORGHUM, sorghum

♦**Sorghum bicolor** (L.) Moench, p. 249
ssp. bicolor, sorghum, sorgho, broom corn, Kafir corn, durra, feterita, etc. [**S:** *S. caffrorum* (Retz.) P. Beauv., *S. caudatum* Stapf var. *caudatum*, *S. dochna* (Forsskal) Snowden, incl. var. *technicum* (Koern.) Snowden, *S. durra* (Forsskal) Stapf] (de Wet, 1978)
ssp. drummondii (Steudel) de Wet, chicken corn, Sudan grass [**S:** *S. drummondii* (Steudel) Millsp. & Chase, *S. sudanense* (Piper) Stapf; **M:** incl. *S. sudanense*] (de Wet, 1978)
♦**S. halepense** (L.) Pers., Johnson grass, p. 248

SPARTINA, cord grass, slough grass

Spartina pectinata Link, prairie cord grass, slough grass, p. 179

SPHENOPHOLIS, wedge grass

Sphenopholis nitida (Biehler) Scribner, shining wedge grass, p. 138
S. obtusata (Michaux) Scribner, wedge grass, p. 138
var. major (Torrey) Erdman [S: *S. intermedia* Rydb.] (Erdman, 1965)
var. obtusata [S: incl. var. *lobata* (Trin.) Scribner] (Erdman, 1965)
S. pensylvanica (L.) A. Hitchc., swamp oats [S: *Trisetum pensylvanicum* (L.) P. Beauv.] (Erdman, 1965), p. 139

SPOROBOLUS, dropseed

Sporobolus airoides (Torrey) Torrey, alkali sacaton, finetop salt grass, p. 166
S. asper (Michaux) Kunth, rough dropseed, p. 164
var. asper [S: incl. var. *pilosus* (Vasey) A. Hitchc., var. *hookeri* (Trin.) Vasey] (Riggins, 1977)
var. drummondii (Trin.) Vasey
S. clandestinus (Biehler) A. Hitchc. [S: incl. var. *canovirens* (Nash) Steyerm. & Kucera] (Riggins, 1977), p. 165
S. cryptandrus (Torrey) A. Gray, sand dropseed, p. 166
S. heterolepis (A. Gray) A. Gray, prairie dropseed, p. 165
♦**S. indicus** (L.) R. Br., smut grass [S: *S. poiretii* (Roemer & Schultes) A. Hitchc.] (Clayton, 1965), p. 165
S. neglectus Nash, poverty grass, p. 162
S. ozarkanus Fern., Ozark dropseed [S: *S. neglectus* Nash var. *ozarkanus* (Fern.) Steyerm. & Kucera] (Reeder, 1975), p. 164
♦**S. pyramidatus** (Lam.) A. Hitchc., whorled dropseed, p. 166
S. vaginiflorus (Torrey) Alph. Wood, poverty grass [S: incl. var. *inaequalis* Fern.] (Hitchcock, 1950; Reeder, 1975), p. 162

STENOTAPHRUM

*♦**Stenotaphrum secundatum** (Walter) Kunze, St. Augustine grass (Ellis, 1990)

STIPA, porcupine grass, needle grass

Stipa spartea Trin., porcupine grass, p. 170

TRIDENS

Tridens flavus (L.) A. Hitchc., purpletop, tall redtop, p. 120
var. chapmanii (Small) Shinn. [S: *T. chapmanii* (Small) Chase] (Tateoka, 1961)
var. flavus
T. muticus (Torrey) Nash, slim tridens, p. 121
var. elongatus (Buckley) Shinn. [S: *T. elongatus* (Buckley) Nash] (Tateoka, 1961)
T. x *oklahomensis* (Feath.) Feath. ex Chase, see named hybrids
T. strictus (Nutt.) Nash, longspike tridens, p. 121

TRIPLASIS, sand grass

Triplasis purpurea (Walter) Chapman, sand grass, p. 121

TRIPSACUM, gama grass

Tripsacum dactyloides (L.) L., eastern gama grass, p. 254

TRISETUM (see also SPHENOPHOLIS)

♦**Trisetum flavescens** (L.) P. Beauv., yellow oats, p. 139

TRITICUM, wheat
[S, G: incl. AEGILOPS] (Gould & Shaw, 1983)

♦**Triticum aestivum** L., wheat, p. 124
♦**T. cylindricum** (Host) Cesati, Passer. & Gibelli, bearded goat grass [S, G: *Aegilops cylindrica* Host] (Gould and Shaw, 1983), p. 126

UNIOLA (see CHASMANTHIUM)

VULPIA, annual fescue
[S, G: FESTUCA] (Lonard and Gould, 1974)

*♦**Vulpia bromoides** (L.) Gray (Christ, 1988b, 1989)
♦**V. myuros** (L.) C. Gmelin, p. 90
var. myuros [S: *Festuca myuros* L.] (Lonard and Gould, 1974)
V. octoflora (Walter) Rydb., sixweeks fescue, p. 89
var. glauca (Nutt.) Fern. [S: *Festuca octoflora* Walter var. *glauca* (Nutt.) Fern., *F. octoflora* var. *tenella* (Willd.) Fern.; G: *F. octoflora*; M: incl. var. *tenella* (Willd.) Fern.] (Lonard and Gould, 1974)
var. octoflora [S: *Festuca octoflora* var. *octoflora*; G: *F. octoflora*] (Lonard and Gould, 1974)
V. sciurea (Nutt.) Henrard, squirrel sixweeks grass [S: *Festuca sciurea* Nutt.] (Lonard and Gould, 1974), p. 90

ZEA, maize, corn

♦**Zea mays** L., corn, maize, Indian corn, p. 254
ssp. mays (Iltis and Doebley, 1980)

ZIZANIA, wild rice

Zizania palustris L., water rice, Indian rice, northern wild rice, river wild rice [**S, G, M:** *Z. aquatica* L.] (Warwick and Aiken, 1986; Tucker, 1988), p. 193
var. interior (Fassett) Dore [**S, M:** *Z. aquatica* var. *interior* Fassett; **G:** *Z. aquatica*] (Warwick and Aiken, 1986; Tucker, 1988)

ZIZANIOPSIS, water millet

Zizaniopsis miliacea (Michaux) Doell & Asch., water millet, p. 193

PONTEDERIACEAE, pickerel weed family

EICHHORNIA, water hyacinth

♦**Eichhornia crassipes** (C. Martius) Solms-Laub., water hyacinth, p. 401

HETERANTHERA, mud plantain

Heteranthera dubia (Jacq.) MacMillan, water star-grass [**G, M:** *Zosterella dubia* (Jacq.) Small] (Rosatti, 1987), p. 404
H. limosa (Sw.) Willd., mud plantain, p. 404
***H. multiflora** (Griseb.) C. Horn, mud plantain [**G:** *H. peduncularis* Benth.] (Horn, 1985; Rosatti, 1987)
H. reniformis Ruíz & Pavón, mud plantain, p. 402
***H. rotundifolia** (Kunth) Griseb. (Horn, 1985; Rosatti, 1987)

PONTEDERIA, pickerel weed

Pontederia cordata L., pickerel weed, p. 401
var. cordata [S: incl. f. *latifolia* (Farw.) House] (Lowden, 1973)

ZOSTERELLA (see HETERANTHERA)

POTAMOGETONACEAE, pondweed family [S: NAJADACEAE]

POTAMOGETON, pondweed

Potamogeton amplifolius Tuckerman, largeleaf pondweed, p. 54
♦**P. crispus** L., curly muckweed, beginner's pondweed, p. 52
P. diversifolius Raf., waterthread pondweed, p. 54
P. epihydrus Raf., ribbonleaf pondweed, p. 54
var. ramosus (Peck) House [S: var. *nuttallii* (Cham. & Schldl.) Fern.; G: *P. epihydrus*] (Voss, 1972)
P. x *faxonii* Morong, see named hybrids
P. foliosus Raf., leafy pondweed, p. 52
var. foliosus [S: incl. var. *macellus* Fern.] (Haynes, 1974)
P. illinoensis Morong, Illinois pondweed, p. 55
P. nodosus Poiret, longleaf pondweed, p. 55
P. pectinatus L., fennel-leaved pondweed, sago pondweed, p. 52
P. pulcher Tuckerman, spotted pondweed, p. 55
P. pusillus L., baby pondweed, p. 54
var. pusillus

RUPPIACEAE, ditchgrass family [S: NAJADACEAE]

RUPPIA, ditchgrass

Ruppia maritima L., ditchgrass, widgeongrass, p. 56
var. rostrata J. Agardh

SMILACACEAE, greenbrier family [S: LILIACEAE]

SMILAX, greenbrier, catbrier

Smilax bona-nox L., greenbrier, catbrier, bullbrier, p. 452
var. bona-nox
var. hederifolia (Beyr.) Fern.
S. ecirrata (Engelm. ex Kunth) S. Watson, carrion flower, p. 451
S. glauca Walter, greenbrier, catbrier, p. 451
var. glauca
var. leurophylla S. F. Blake
S. herbacea L. [S: *S. herbacea* var. *herbacea*], see excluded taxa
S. hispida Muhlenb. ex Torrey, bristly greenbrier, catbrier [S: *S. tamnoides* L. var. *hispida* (Muhlenb.) Fern.] (Clausen, 1951), p. 452
***S. illinoensis** Mangaly, carrion flower (Mangaly, 1968)
S. lasioneuron Hook., carrion flower [S, G: *S. herbacea* var. *lasioneuron* (Hook.) A. DC.] (Mangaly, 1968), p. 451
S. pulverulenta Michaux, carrion flower, p. 450
S. rotundifolia L., greenbrier, catbrier, p. 454

SPARGANIACEAE, bur-reed family

SPARGANIUM, bur-reed

Sparganium americanum Nutt., p. 49
S. androcladum (Engelm.) Morong, p. 49
S. eurycarpum Engelm., p. 49

TYPHACEAE, cattail family

TYPHA, cattail

Typha angustifolia L., narrow-leaved cattail, p. 48
T. x *glauca* Godron, see named hybrids
T. latifolia L., common cattail, p. 46
f. ambigua (Sonder) Kronfeld
f. latifolia

XYRIDACEAE, yellow-eyed grass family

XYRIS, yellow-eyed grass

Xyris torta Smith, p. 392

ZANNICHELLIACEAE, horned pondweed family [S: NAJADACEAE]

ZANNICHELLIA, horned pondweed

Zannichellia palustris L., p. 56
var. major (Boenn.) W. D. J. Koch

NAMED HYBRIDS

The following is not an exhaustive list of the hybrids that have been documented in the Missouri flora. Rather, it includes only those hybrids that have been assigned binomials (as opposed to those that are only listed as species A x species B), so as to account for the epithets that appear in the taxonomic and floristic literature. The presumed parentage for each hybrid is listed, although in most cases the actual parentage has not been confirmed. Some species that are of presumed hybrid origin, such as *Apocynum medium*, but are fertile and of widespread distribution, have been retained in the main portion of the catalogue and are not listed with a cross sign (x) before the species epithet.

ASPLENIACEAE

Asplenium x ebenoides Scott, Scott's spleenwort (*A. platyneuron* x *A. rhizophyllum*), p. 31

Asplenium x gravesii Maxon, Graves' spleenwort (*A. bradleyi* x *A. pinnatifidum*), p. 32

ASTERACEAE

Aster x amethystinus Nutt. (*A. ericoides* x *A. novae-angliae*), p. 1516

Eupatorium x truncatum Muhlenb. ex Willd. [**S:** *E. perfoliatum* L. var. *cuneatum* (Engelm. ex Torrey & A. Gray) Engelm. ex A. Gray; **M:** *E.* x *polyneuron* (F. J. Herm.) Wunderlin] (Wunderlin, 1972; Cronquist, 1980; Tucker and Dill, 1989), p. 1464

Helianthus x cinereus Torrey & A. Gray var. **sullivantii** Torrey & A. Gray (*H. mollis* x *H. occidentalis*), p. 1571

Helianthus x laetiflorus Pers. (*H. rigidus* x *H. tuberosus*), p. 1570

***Vernonia x illinoensis** Gleason (*V. gigantea* x *V. missurica*) (Faust, 1972, 1977)

*Vernonia x peralta Daniels (Faust, 1972) (note that Daniels (1907) described *V. pseudobaldwinii* and *V. pseudodrummondii* in the same publication as *V. peralta*, all of which Faust (1972) designated as representing *V. baldwinii* ssp. *baldwinii* x *V. missurica*; we are here selecting one of these equivalent names for this hybrid)

CAMPANULACEAE

Lobelia x speciosa Sweet, hybrid cardinal flower [S: *L. siphilitica* var. *hybrida* Hook.] (*L. cardinalis* x *L. syphilitica*) (Bowden, 1982), p. 1440

CHENOPODIACEAE

♦Chenopodium x variabile Aellen var. murrii Aellen (*C. album* x *C. berlandieri* var. *zschackei*), p. 614

CYPERACEAE

Carex x deamii F. J. Herm. (*C. shortiana* x *C. typhina*), p. 366
Carex x subimpressa Clokey (*C. hyalinolepis* x *C. lanuginosa*), p. 376
Cyperus x mesochorus Geise [M: *C. filiculmis* M. Vahl] (*C. lupulinus* ssp. *lupulinus* x *C. schweinitzii*) (Marcks, 1974), p. 268

EQUISETACEAE

*Equisetum x ferrissii Clute (*E. hyemale* var. *affine* x *E. laevigatum*) (Key, 1982)

S: Steyermark G: Great Plains Flora M: Mohlenbrock

FABACEAE

Amorpha x notha E. J. Palmer (*A. canescens* x *A. fruticosa*), p. 903

Baptisia x bicolor Greenman & Larisey (*B. australis* var. *minor* x *B. bracteata* var. *glabrescens*), p. 880

Lespedeza x brittonii Bickn. [**S:** *L. procumbens* Michaux var. *elliptica* S. F. Blake] (*L. procumbens* x *L. virginica*) (Clewell, 1966), p. 928

Lespedeza x manniana Mackenzie & Bush (*L. capitata* x *L. violacea*), p. 930

Lespedeza x neglecta (Britton) Mackenzie & Bush [**S:** *L. stuevei* Nutt. var. *angustifolia* Britton] (*L. stuevei* x *L. virginica*) (Clewell, 1966), p. 930

Lespedeza x nuttallii Darl. (*L. hirta* x *L. intermedia*), p. 929

Lespedeza x simulata Mackenzie & Bush (*L. capitata* x *L. virginica*), p. 930

FAGACEAE

Quercus x anceps E. J. Palmer (*Q. falcata* x *Q. imbricaria*), p. 542

Quercus x bebbiana C. Schneider (*Q. alba* x *Q. macrocarpa*), p. 535

Quercus x bushii Sarg. (*Q. marilandica* x *Q. velutina*), p. 543

Quercus x deamii Trel. (*Q. macrocarpa* x *Q. muehlenbergii*), p. 537

Quercus x egglestonii Trel. (*Q. imbricaria* x *Q. shumardii*), p. 542

Quercus x exacta Trel. (*Q. imbricaria* x *Q. palustris*), p. 542

Quercus x fernowii Trel. (*Q. alba* x *Q. stellata*), p. 535

Quercus x filialis Little (*Q. phellos* x *Q. velutina*), p. 542

Quercus x hawkinsiae Sudw. (*Q. rubra* x *Q. velutina*), p. 545

Quercus x heterophylla Michaux f. (*Q. phellos* x *Q. rubra*), p. 542

Quercus x humidicola E. J. Palmer (*Q. bicolor* x *Q. lyrata*), p. 537

***Quercus x introgressa** P. Thompson ([*Q. muehlenbergii* x *Q. prinoides*] x *Q. bicolor*) (Thompson, 1977) (note that no binomial is available for *Q. muehlenbergii* x *Q. prinoides*, which was also reported for Missouri by Thompson)
Quercus x jackiana C. Schneider (*Q. alba* x *Q. bicolor*), p. 535
Quercus x leana Nutt. (*Q. imbricaria* x *Q. velutina*), p. 542
Quercus x ludoviciana Sarg. (*Q. falcata* x *Q. phellos*), p. 542
Quercus x moultonensis Ashe (*Q. phellos* x *Q. shumardii*), p. 542
Quercus x mutabilis E. J. Palmer & Steyerm. (*Q. palustris* x *Q. shumardii*), p. 550
Quercus x runcinata (A. DC.) Engelm. (*Q. imbricaria* x *Q. rubra*), p. 542
Quercus x schuettei Trel. (*Q. bicolor* x *Q. macrocarpa*), p. 538
Quercus x stelloides E. J. Palmer (*Q. prinoides* x *Q. stellata*), p. 539
Quercus x sterrettii Trel. (*Q. lyrata* x *Q. stellata*), p. 536
Quercus x tridentata (A. DC.) Engelm. (*Q. imbricaria* x *Q. marilandica*), p. 542
Quercus x vaga E. J. Palmer & Steyerm. (*Q. palustris* x *Q. velutina*), p. 545

GENTIANACEAE

Gentiana x pallidocyanea J. Pringle (*G. andrewsii* x *G. flavida*), p. 1190

JUGLANDACEAE

Carya x lecontei Little, bitternut hickory (*C. aquatica* x *C. illinoensis*), p. 516
Carya x nussbaumeri Sarg. (*C. illinoensis* x *C. laciniosa*), p. 518

LAMIACEAE

♦**Mentha x gentilis** L. [S, G: *M.* x *cardiaca* Gerarde ex Baker] *M. arvensis* x *M. spicata*) (Lebeau, 1974) (note that although the designations "nothomorph" and "subhybrid" used by Lebeau and some other authors are not used here, the rationale for combining all of the interspecific hybrid morphs of the same parentage under a single hybrid epithet is accepted), p. 1306

♦**Mentha x piperita** L., peppermint, bergamot mint [S, M: incl. *M. citrata* Ehrh.] (*M. aquatica* x *M. spicata*) (Lebeau, 1974), p. 1306

LILIACEAE

*♦**Narcissus x medioluteus** Miller, daffodil [*N.* x *biflorus* Curtis] (*N. poeticus* x *N. tazetta*) (Mühlenbach, 1979; D. A. Webb, 1980)

POACEAE

♦**Hordeum x caespitosum** Scribner, bobtail barley [S: *H. jubatum* var. *caespitosum* (Scribner) A. Hitchc.] (*H. brachyantherum* x *H. jubatum*) (Mitchell and Wilton, 1964), p. 133

Muhlenbergia x curtisetosa (Scribner) Bush [S: *M. schreberi* J. Gmelin var. *curtisetosa* (Scribner) Steyerm. & Kucera] (this binomial has been used to describe a series of hybrids involving *M. schreberi* and various other *Muhlenbergia* species) (Pohl, 1969), p. 160

Tridens x oklahomensis (Feath.) Feath. ex Chase (*T. flavus* x *T. strictus*) (Schuckman and Kucera, 1984), p. 120

POTAMOGETONACEAE

Potamogeton x faxonii Morong (*P. illinoiensis* x *P. nodosus*), p. 56

ROSACEAE

Crataegus x conspecta Sarg. [S: *C. locuples* Sarg.] (Phipps and Muniyamma, 1980) (Gleason and Cronquist (1963) suggested that this represents the hybrid *C. mollis* x *C. punctata*, while Little (1979) suggested *C. mollis* x *C. pruinosa*, but Kruschke (1965) argued against a hybrid interpretation), p. 820

Crataegus x danielsii E. J. Palmer [S: incl. f. *glabra* E. J. Palmer] (Gleason and Cronquist (1963) and Little (1979) have suggested that this taxon represents the hybrid *C. crus-galli* x *C. punctata* Jacq.; if this is shown to be true, then an older name, *C.* x *disperma* Ashe, probably should be used instead), p. 814

Crataegus x incaedua Sarg. (Gleason and Cronquist (1963) and Little (1979) suggested that this taxon represents the hybrid *C. calpodendron* x *C. punctata* Jacq. sensu lato), p. 815

Crataegus x kelloggii Sarg. (S: suggested that this taxon represents the hybrid *C. mollis* x *C. margaretta*, Gleason and Cronquist (1963) suggested *C. mollis* x *C. rotundifolia* Moench, and Little (1979) suggested *C. mollis* x *C. chrysocarpa* Ashe; the latter two placed *C. margaretta* in synonymy with *C. rotundifolia* and *C. chrysocarpa*, respectively), p. 816

Crataegus x latebrosa Sarg. (S: suggested that this taxon represents the hybrid *C. collina* x *C. noelensis*), p. 816

Crataegus x lettermanii Sarg. [**S:** incl. *C. hirtiflora* Sarg.; **M:** *C. collina*] (**S:** suggested that this taxon represents the hybrid *C. mollis* x *C. collina*, while Gleason and Cronquist (1963) and Little (1979) suggested *C. mollis* x *C. punctata* Jacq. sensu lato (incl. *C. collina*); the name *C. lettermanii* is apparently the oldest name attributable to such a hybrid), p. 815

Crataegus x nitida (Engelm.) Sarg. (Gleason and Cronquist (1963) and Little (1979) suggested that this taxon represents the hybrid *C. crus-galli* x *C. viridis*), p. 808

Crataegus x nuda Sarg. (Gleason and Cronquist (1963) and Little (1979) suggested that this taxon represents the hybrid *C. crus-galli* x *C. succulenta*; if this can be verified then the name *C. persimilis* Sarg. has priority), p. 822

Crataegus x simulata Sarg. (**S:** suggested that this taxon might represent the hybrid *C. calpodendron* x *C. palmeri*, while Little (1979) suggested *C. calpodendron* x *C. crus-galli* sensu lato (incl. *C. palmeri*)), p. 822

Crataegus x vailiae Britton [**S:**, Gleason and Cronquist (1963), and Little (1979) all suggested that this taxon might represent the hybrid *C. calpodendron* x *C. uniflora*), p. 822

♦**Fragaria x ananassa** Duchesne, garden strawberry (*F. chiloensis* x *F. virginiana*), p. 824

♦**Malus x soulardii** (L. Bailey) Britton, Soulard crab [**S:** *Pyrus* x *soulardii* L. Bailey] (*M. ioensis* x *M. pumila*) (Williams, 1982; Voss, 1985b), p. 800

♦**Rosa x centifolia** L., cabbage rose (a cultigen of such antiquity that its parentage is not known precisely; *R. gallica* has been suggested as being involved in its development), p. 850

♦**Rosa x damascena** Miller, Damask rose (a cultigen of such antiquity that its parentage is not known precisely; *R. gallica* and *R. moschata* have been suggested as being involved in its development), p. 850

*♦**Spiraea x vanhouttei** (Briot) Zabel, bridal wreath (*S. cantoniensis* x *S. trilobata*) (Hornberger, 1980; Ohmart, 1987)

SALICACEAE

♦**Populus x canadensis** Moench, Carolina poplar, Eugene poplar] [**S:** *P.* x *eugenei* Simon-Louis] (*P. deltoides* x *P. nigra*) (Eckenwalder, 1977a), p. 507

♦**Populus x jackii** Sarg., balm-of-Gilead [**S, M:** P. x *gileadensis* Roul.] (*P. balsamifera* x *P. deltoides*) (Eckenwalder, 1977a; see also **G:** for discussion), p. 506

Salix x bebbii Gand. [**S:** *S.* x *myricoides* Muhlenb.] (*S. eriocephala* x *S. sericea*) (Argus, 1986) (note that Argus (1986) was uncertain whether the name *bebbii* actually applied to this hybrid), p. 498

Salix x glatfelteri C. Schneider (*S. amygdaloides* x *S. nigra*), p. 496

*♦**Salix x rubens** Schrank (*S. alba* x *S. fragilis*) (Mühlenbach, 1983)

TYPHACEAE

T. x glauca Godron, hybrid cattail (*T. angustifolia* x *T. glauca*), p. 48

VERBENACEAE

Verbena x deamii Mold. (*V. bracteata* x *V. stricta*), p. 1261

Verbena x engelmannii Mold. (*V. hastata* x *V. urticifolia*), p. 1258

Verbena x illicita Mold. (*V. stricta* x *V. urticifolia*), p. 1258

Verbena x moechina Mold. (*V. simplex* x *V. stricta*), p. 1260

Verbena x perriana Mold. (*V. bracteata* x *V. urticifolia*), p. 1261

Verbena x rydbergii Mold. (*V. hastata* x *V. stricta*), p. 1258

VIOLACEAE

Viola x bernardii E. Greene (*V. pedatifida* x *V. sororia*), p. 1072
Viola x greenei House (*V. sagittata* x *V. sororia*), p. 1076
Viola x populifolia E. Greene (*V. sororia* x *V. triloba*), p. 1076

EXCLUDED TAXA

ALISMATACEAE

Alisma plantago-aquatica L. [S: *A. plantago-aquatica* var. *plantago-aquatica*] (according to Björkvist (1967, 1968), true *A. plantago-aquatica* does not occur in North America; the specimen cited by S: as the basis for inclusion of this taxon in Missouri is actually *A. triviale* Pursh [S: *A. plantago-aquatica* var. *americanum* Schultes & Schultes f.]), p. 58

Sagittaria australis (J. G. Smith) Small (this species was reported as occurring in Missouri by Beal et al. (1982) without citation of locality or specimens; examination of the notes of the late Ernest Beal by one of his coauthors, Jean Wooten (University of Southern Mississippi, pers. comm.) disclosed no information in support of this report; although it appears likely that this taxon actually occurs in southeastern Missouri, it must be excluded for the present)

ANACARDIACEAE

Toxicodendron radicans (L.) Kuntze ssp. **radicans** x ssp. **pubens** (Engelm. ex S. Watson) Gillis [S: *Rhus radicans* L. var. *radicans* f. *hypomalaca* Fern.] (Gillis, 1971) (the type of this taxon is a putative hybrid plant, but the name was misapplied by many earlier authors to indicate plants referred by Gillis (1971) to *T. radicans* ssp. *pubens*), p. 1004

APIACEAE

Torilis japonica (Houtt.) DC. [G: *T. arvensis* (Hudson) Link] (Howell, 1962) (note that the nomenclatural change cited in G: reflects redetermination of the available specimens, rather than nomenclatural synonymy), p. 1128

ARACEAE

Symplocarpus foetidus (L.) Nutt. (Steyermark (1971) stated that the report of this taxon for Missouri by Eisendrath (1969) was based upon cultivated plants; Missouri is outside the range for the species cited by Wilson (1960))

ASTERACEAE

Antennaria solitaria Rydb. (this species was reported for Missouri by Bayer and Stebbins (1982) without citation of locality or specimens; Randall Bayer (University of Alberta, pers. comm.) has checked his notes and was unable to substantiate the report; although it seems likely that this taxon will eventually be found in southeastern Missouri, it must be excluded for the present)

Arctium tomentosum Miller (Mühlenbach (1983) reported that the collections cited by S: as the basis for inclusion of this species in the Missouri flora were misdetermined and are actually the more common *A. minus* Bernh.), p. 1619

Prenanthes altissima L. **var. altissima** (Cronquist, 1980) (note that there is no evidence to support this undocumented report in the herbarium specimens we have been able to examine thus far, although this variety is likely to be found in the state eventually)

Pyrrhopappus grandiflorus (Nutt.) Nutt. (the single Missouri collection (*Demetrio 104*, GH) cited by Northington (1971) as belonging to this species was actually annotated by him as *P. carolinianus* (Walter) DC.; examination of a photocopy of this specimen kindly provided by Michael Canoso (Harvard University Herbaria) confirmed it to be an atypical sample of the latter species; *P. grandiflorus* occurs in areas very close to southwestern Missouri and should be sought there in the future, but must be excluded from the state's flora for the present)

Solidago missouriensis Nutt. var. **missouriensis** (plants attributed by S: to var. *missouriensis* (of the Pacific Northwest) are all var. *fasciculata* Holzinger) (Cronquist, 1955; Barkley, 1986), p. 1488

Thelesperma ambiguum A. Gray (according to Mühlenbach (1979), Missouri materials previously attributed to this species are actually *T. filifolium* (Hook.) A. Gray [*T. trifidum* (Poiret) Britton]), p. 1653

BRASSICACEAE

Rorippa islandica (Oeder ex Murray) Borbás var. **islandica** (Stuckey, 1972) (note that *R. islandica* is a distinct species, confined to Europe and Greenland and absent from North America; the indigenous American taxa have been separated as *R. palustris* (L.) Besser), p. 760

Rorippa palustris (L.) Besser ssp. **hispida** (Desv.) Jonsell var. **hispida** [S, M: *R. islandica* var. *hispida* (Desv.) Butters & Abbe] (according to Stuckey (1972) plants identified as var. *hispida* by S: were misdetermined and should be called var. *fernaldiana* (Butters and Abbe) Stuckey), p. 760

Rorippa teres (Michaux) Stuckey var. **teres** [S: *R. obtusa* (Nutt.) Britton var. *obtusa*] (according to Stuckey (1972), plants referred to this taxon by S: actually represent a mixture of *R. tenerrima* E. Greene and *R. truncata* (Jepson) Stuckey; true *R. teres* occurs primarily in the Atlantic Coastal Plain and Mexico), p. 760

BUDDLEJACEAE

Buddleja davidii Franchet (Mühlenbach (1979) reported this ornamental shrub based on a single plant growing adjacent to a cultivated area in St. Louis, which never propagated itself and was later destroyed; it cannot be included as a noncultivated member of Missouri's flora)

CAMPANULACEAE

Lobelia appendiculata A. DC. (this taxon was excluded from the state by McVaugh (1942) and S:, but was once again mentioned as occurring in southwestern Missouri in G:; no further specimens, beside those redetermined by McVaugh, have been found to substantiate this claim), p. 1440

CARYOPHYLLACEAE

Stellaria pubera Michaux (this taxon has not been collected in Missouri since the single 1927 specimen made by Kellogg from what is now the Missouri Botanical Garden's Shaw Arboretum; S: indicated that this collection may have originated from cultivated plants and this seems correct; the first plantings on the Garden's new property were done in 1926, when the land was purchased, and Kellogg was involved with the herbaceous plantings there; the species was not included in the initial survey of plants growing naturally

(*Stellaria pubera*, continued)
on the grounds (anonymous, 1928), which Kellogg surely assisted in preparing; Kellogg is also well known for pressing vouchers of various species cultivated at the Missouri Botanical Garden), p. 646

CHENOPODIACEAE

Atriplex argentea Nutt. (according to Mühlenbach (1979), the Missouri collections are actually *A. truncata* (Torrey) A. Gray), p. 615

Chenopodium atrovirens Rydb. (**G:** included Missouri in the range given for this taxon, but according to one of the authors, Daniel Crawford (Ohio State Univ., pers. comm.), this was a printer's error and was intended to read MT (Montana), rather than MO)

Kochia iranica (Hausskn. & Bornm.) Litv. (according to Mühlenbach (1983) the plants he had previously (Mühlenbach, 1979) attributed to this species are actually *K. sieversiana* (Pallas) C. Meyer, a taxon herein placed in synonymy with *K. scoparia* (L.) Schrader)

CLUSIACEAE

Hypericum canadense L. (D. H. Webb (1980) excluded Missouri and surrounding states from the distribution of this species; the single Missouri specimen is *H. majus* (A. Gray) Rusby), p. 1061

Hypericum densiflorum Pursh [**S:** var. *densiflorum* only] (this taxon was stated to occur in Ripley county by **S:** without citation of any collections; its range (Adams, 1962; Utech and Iltis, 1970) is far to the east of Missouri and no collections to substantiate its occurrence in the state have been found), p. 1059

COMMELINACEAE

Commelina caroliniana Walter (most North American collections attributed to this species, including all Missouri materials, are actually *C. diffusa* Burm. f.) (Faden, 1989), p. 398

CRASSULACEAE

Sedum telephium L. (incl. ssp. *fabaria* (Koch) Schinz & R. Keller, better known as *S. fabaria* Koch) (Clausen, 1975) (although S: mentioned the existence of this taxon in gardens, he did not state that the entity *fabaria* escaped from cultivation; other records of *S. telephium* are referrable to *S. purpureum*), p. 773

CYPERACEAE

Cladium mariscoides (Muhlenb.) Torrey (this taxon was reported for Missouri by Tucker (1987) without citation of locality or specimens; according to Steve Orzell (Texas Natural Heritage Program, pers. comm.), who has discussed this matter with Gordon Tucker, the report may be attributed to earlier, mistaken reports in the literature)

Fimbristylis caroliniana (Lam.) Fern. (Kral, 1971; Dunn, 1982) (note that Missouri plants attributed to this southeastern coastal plain species are actually *F. puberula*), p. 283

DRYOPTERIDACEAE

Cystopteris fragilis (L.) Bernh. [S: *C. fragilis* var. *fragilis* f. *fragilis*] (this taxon was misunderstood by most earlier workers and the specimens from Missouri comprise a mixture of *C. protrusa* (Weath.) Blasdell and *C. tennesseensis* Shaver) (Blasdell, 1963; Peck, 1982), p. 36

Dryopteris x australis (Wherry) Small [S: *D. clintoniana* (D. Eaton) Dowell var. *australis* Wherry] (this rare hybrid occurs only in the southeastern United States; Missouri collections are *D. celsa* (W. Palmer) Small, one of the parental species) (Wagner, 1970; Montgomery, 1982), p. 41

EUPHORBIACEAE

Euphorbia heterophylla L. [S: incl. var. *graminifolia* (Michaux) Engelm.] (Dressler (1961) noted that true *E. heterophylla* [as *Poinsettia heterophylla* (L.) Klotzsch & Garcke] occurs to the south and west of Missouri and that our plants are *E. cyathophora* Murray [as *Poinsettia cyathophora* (Murray) Klotzsch & Garcke]), p. 986

Tragia urticifolia Michaux (according to Miller and Webster (1967), reports of this species from Missouri should be referred to *T. betonicifolia* Nutt. and *T. ramosa* Torrey), p. 982

FABACEAE

Anthyllis vulneraria L. (Steyermark, 1963) (note that S: was unable to locate Missouri material of this species outside of cultivation, but did not exclude it officially from the flora; it has not been collected since), p. 894

Dalea compacta Sprengel var. **pubescens** (A. Gray) Barneby [S: *Petalostemon purpureum* f. *pubescens* (A. Gray) Fassett] (this taxon occurs only south and west of Missouri; our plants are referrable to *D. purpurea* Vent. var. *purpurea*) (Wemple, 1970; Barneby, 1977), p. 901

Desmodium humifusum (Muhlenb. ex Willd.) Beck (according to the noted specialist on North American legumes, Duane Isely (Iowa State University, pers. comm.), who has examined the specimens from the state attributed to *D. humifusum*, Missouri materials were misdetermined by earlier workers and are actually *D. perplexum* B. G. Schubert; true *D. humifusum* is a rare taxon endemic to the northeastern United States), p. 924

Rhynchosia minima (L.) DC. (Grear, 1978) (the specimen [*Reverchon 3768* (MO)] cited by Grear (1978) was actually collected at Sheldon, near Houston, Texas, rather than in Missouri)

Vicia hirsuta (L.) Gray (Missouri plants attributed to this taxon are actually *V. villosa* Roth ssp. *varia* (Host) Corbière [*V. dasycarpa* Ten.] (Mühlenbach, 1979), p. 940

GENTIANACEAE

Gentiana clausa Raf. (Missouri materials attributed to this taxon are referrable to *G. andrewsii* Griseb. var. *dakotica* Nelson) (Pringle, 1967), p. 1190

LAMIACEAE

Scutellaria montana Chapman [S: *S. serrata* Andrews var. *montana* (Chapman) Penl.] (Collins, 1976) (although the single Missouri collection attributed to this taxon was not examined during his doctoral research, C. Leo Collins

(*Scutellaria montana*, continued)
(Tennessee Valley Authority, pers. comm.) has subsequently determined it to be *S. elliptica* Muhlenb.), p. 1272

LENTIBULARIACEAE

Utricularia vulgaris L. (Taylor (1989) has shown that this Old World taxon is distinct from the New World plants, which should be called *U. macrorhiza* Le Conte), p. 1375

LINACEAE

Linum rigidum Pursh var. **rigidum** (Rogers, 1968) (the Missouri collections are referrable to var. *compactum* (Nelson) C. Rogers), p. 957

LYTHRACEAE

Ammannia auriculata Willd. (Missouri material attributed to this more western taxon is referrable to *A. robusta* Heer & Regel) (Graham, 1979, 1985), p. 1089

MALVACEAE

Callirhoe papaver (Cav.) A. Gray (Missouri materials attributed to this taxon are referrable to *C. bushii* Fern. [**S:** *C. papaver* var. *bushii* (Fern.) Waterf.]) (Dorr, 1990), p. 1049

Gossypium herbaceum L. (Missouri materials attributed to this taxon are referrable to *G. hirsutum* L.) (Mühlenbach, 1979), p. 1652

MARSILEACEAE

Marsilea vestita Hook. & Grev. **ssp. vestita** [S: *M. mucronata* A. Braun] (Missouri materials attributed to this taxon are referrable to *M. quadrifolia* L.) (Johnson, 1985), p. 18

OLEACEAE

Ligustrum vulgare L. (although this species was fully treated and illustrated by S: on the basis of its potential presence in Missouri, it was stated to be excluded from the flora based on the lack of collections from noncultivated plants; although it still seems likely that this species will be found in the state, it has yet to be collected from any spontaneous population), p. 1183

ONAGRACEAE

Gaura biennis L. (note that Raven and Gregory (1972) redetermined all Missouri collections attributed to this species as *G. longiflora* Spach; *G. biennis* is closely related to this species and occurs in adjacent Illinois; although this taxon may eventually be located in northeastern Missouri, for the present it must be excluded from the state's flora), p. 1107

Oenothera kunthiana (Spach) Munz (the single collection upon which S: based the report of this southwestern species in Missouri was misidentified and has been redetermined as *Oenothera speciosa* Nutt. by Warren L. Wagner, Smithsonian Institution), p. 1105

ORCHIDACEAE

Spiranthes ochroleuca (Rydb.) Rydb. [**S:** *S. cernua* (L.) Richard var. *ochroleuca* (Rydb.) Ames] (Missouri materials attributed to this northeastern taxon are referrable to *S. magnicamporum* Sheviak) (Sheviak, 1982; Sheviak and Catling, 1980), p. 482

OXALIDACEAE

Oxalis lyonii Pursh [*O. priceae* Small ssp. *texana* (Small) Eiten] (Mühlenbach, 1979; Lourteig, 1979) (the single specimen (*Mühlenbach 3220*, MO) upon which Mühlenbach (1979) based his report of this species' occurrence in Missouri was misdetermined and is actually *O. corniculata* L.)

POLYGONACEAE

Rumex orbiculatus A. Gray (Missouri materials attributed to this species are referrable to *R. cristatus* DC.) (Mühlenbach, 1983), p. 580

PRIMULACEAE

Anagallis arvensis L. **ssp. caerulea** (Schreber) Vollm. [**S:** *A. arvensis* f. *caerulea* (Schreber) Baumg.; **M:** *A. arvensis*] (the infraspecific taxonomy of this species has been confused by repeated attempts of authors to delimit a blue-flowered taxon under the name *caerulea*; in actuality ssp. *arvensis* is differentiated from ssp. *caerulea* by details of corolla shape and glandularity, and contains both red- and blue-flowered forms; the blue-flowered collections of this species from Missouri are apparently all ssp. *arvensis*; see Taylor (1955) and Channell and Wood (1959) for discussion), p. 1171

S: Steyermark **G:** Great Plains Flora **M:** Mohlenbrock

RANUNCULACEAE

Anemone patens L. (reported without locality by **G:**, but no herbarium specimens have been located to substantiate this claim; Missouri is far south of the range of this species and it is likely that the report originated as a typographical error: MO, instead of MN or MT)

SOLANACEAE

Solanum villosum Miller (Missouri materials attributed to this taxon are referrable to *S. sarrachoides* Sendtner) (Mühlenbach, 1979), p. 1312

SMILACACEAE

Smilax herbacea L. [**S:** *S. herbacea* var. *herbacea*] (according to Mangaly (1968), *S. herbacea* sensu stricto is restricted to the Appalachian region; Missouri materials attributed to this taxon are referrable to *S. lasioneuron* Hook. [**S, G:** *S. herbacea* var. *lasioneuron* (Hook.) A. DC.]), p. 451

TAMARICACEAE

Tamarix gallica L. (Missouri materials attributed to this taxon are referrable to *T. parviflora* DC.) (Baum, 1967), p. 1066

VERBENACEAE

Verbena x blanchardii Mold. (*V. hastata* x *V. simplex*) (Moldenke, 1982) (this hybrid was reported for Missouri without citation of a voucher; an examination of collections in the Moldenke herbarium, now at TEX, by Carol Todzia (Univ. of Texas, pers. comm.), failed to reveal any supporting specimens; although this hybrid is to be expected in Missouri, it must remain excluded for the present)

Verbena xutha Lehm. (Moldenke, 1980) (this taxon was reported for Missouri without citation of a voucher; an examination of collections in the Moldenke herbarium, now at TEX, by Carol Todzia (University of Texas, pers. comm.), failed to reveal any supporting specimens; although this species might be expected as an introduction in Missouri, it must remain excluded for the present)

ZYGOPHYLLACEAE

Kallstroemia hirsutissima Vail (Missouri materials attributed to this taxon are referrable to *K. parviflora* Norton) (Porter, 1969a, b), p. 966

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